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ABSTRACT

The Utah project was funded in June, 1970, and refunded from June, 1972 to June 1973, to provide Technical Assistance to educators in sparsely settled rural areas of the State. Technical assistance includes information, consultative and program development services. Three full-time Field Agents are based in Regional Cooperative Service Centers and each provide assistance to at least six rural districts. The Field Agents work with local teachers and administrators assisting in the definition of needs and the location of appropriate information through a centralized Reference Center housed at the Utah State Board of Education. Where it is desired by the client, the Field Agent continues to involve himself in helping the client consider alternatives, locate consultants and generally assist throughout the adoption and installation of new programs. Services include: computerized searches of the ERIC system, circulation of PREP Kits, circulation to clients of the ERIC microfiche collection (1968-present), hard copy and fiche duplication when necessary, access to local resources, which include university libraries, university personnel, State library, Historical Society, local research libraries, and a personalized reference and information service. SEA consultant services to LEA personnel are arranged on request by project staff. (Author/NH)

BR-0-0742

ED 069327

RESEARCH INFORMATION FOR THE EDUCATOR TO MEET THE EDUCATIONAL NEEDS OF UTAH'S CHILDREN

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
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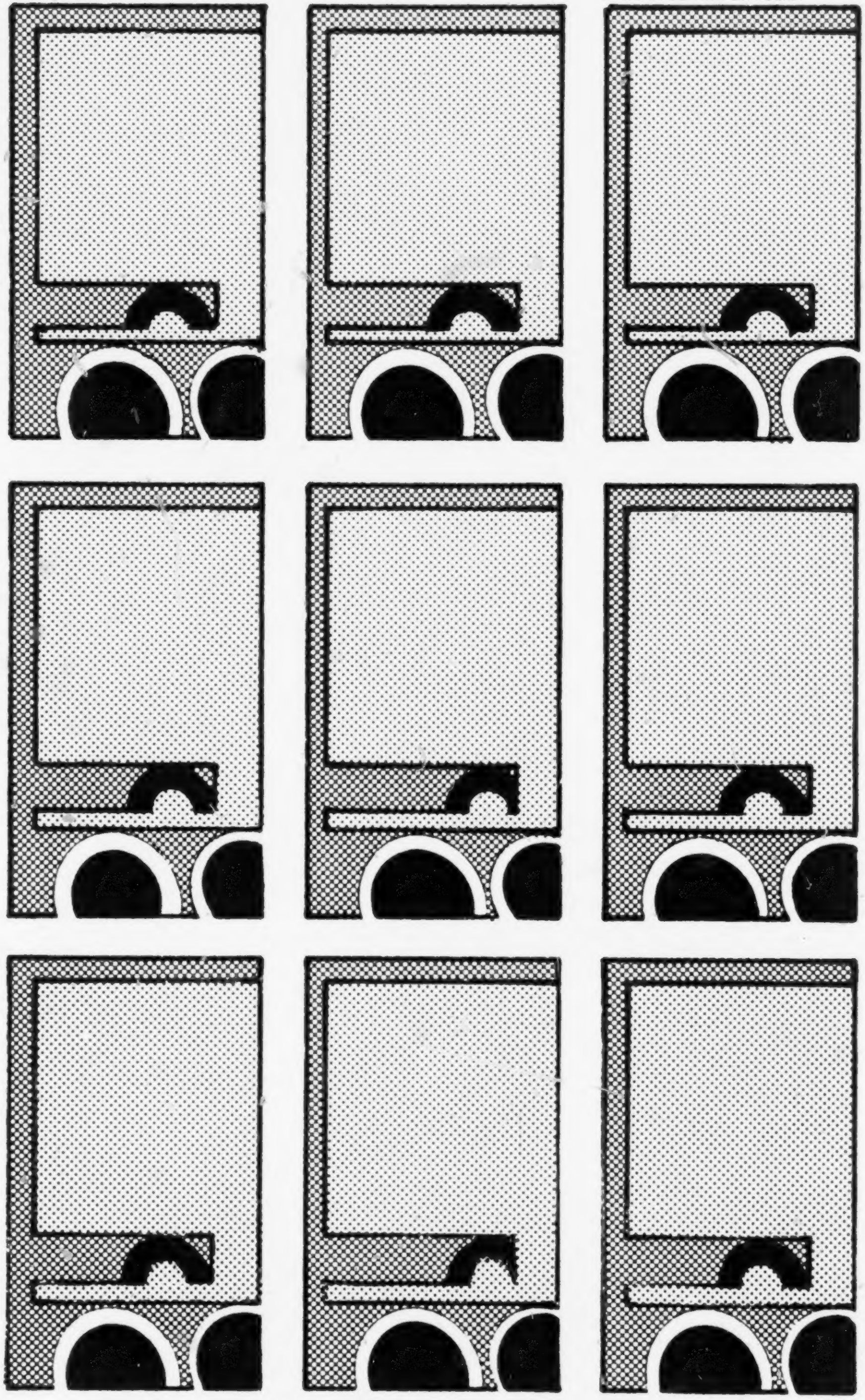
Technical Assistance Information Service

Utah State Board of Education
Salt Lake City, Utah 84111
1400 University Club Building



LI 003 994

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TECHNICAL ASSISTANCE PROJECT

INTERIM REPORT

EXECUTIVE SUMMARY

Overview
Abstract of Original Proposal
Abstract of Continuation Proposal
Final Word

UTAH TECHNICAL ASSISTANCE PROJECT/INTERIM REPORT

THE PROJECT IN REVIEW

*The Project has served clients with 2,679 requests since August 1970.

*Client's information needs determine type of search.

*The Project began with three agents. The Project now has five agents and thirteen district agents named.

*There is a need to have a large variety of resources to meet the variety of requests.

*The Agent's Regional Centers are becoming resource centers outfitted with indexes and other dissemination materials.

*The Project was refunded and is in its third year of operation.

STATISTICAL REVIEW

Number Of:	1970-1971	1971-1972
ERIC Requests	928	1,740
SID Searches*	116	566
CAT Searches*	160	579
PET Searches*	123	421
CAP Searches*	172	193
Types of Users:		
Superintendents	41	60
Principals	139	264
Teachers	179	353
Specialists	222	574
Coordinator/Director	54	281
Miscellaneous	115	352
Follow-up Users:		
One time users		322
More than five requests		174
Microfiche - Circulated		2,729
Duplicated		208

(*These Searches began March 1971)

A LOOK AHEAD

*Computerized ERIC Searches done locally by Utah Technical Assistance Project.

*More district agents to be identified and actuated.

*More relevant and individualized searches and faster turn around time.

*Urban District to be selected.

UTAH PILOT STATE DISSEMINATION PROGRAM

Director: Dr. Kenneth P. Lindsay
Utah State Board of Education
136 East South Temple
Salt Lake City, Utah 84111
(801) 328-5431

The Utah project was funded in June, 1970 to provide Technical Assistance to educators in sparsely settled rural areas of the State. The project was refunded from June, 1972 to June, 1973. Technical assistance includes information, consultative and program development services. Three full-time Field Agents are based in Regional Cooperative Service Centers and each provide assistance to at least six rural districts. One other agent serves four geographically large rural districts but does not receive financial assistance from the project. Projected plans call for enlarging the project in FY 73 to cover a larger urban district and to institutionalize the district agent and provide for local computerized searches of the ERIC system.

The Field Agents work with local teachers and administrators assisting in the definition of needs and the location of appropriate information through a centralized Reference Center housed at the Utah State Board of Education. Where it is desired by the client, the Field Agent continues to involve himself in helping the client consider alternatives, locate consultants and generally assist throughout the adoption and installation of new programs.

The project staff at the State Education Office consists of a Project Director, Project-Reference Center Manager, Information Retrieval Agent, secretary, and a work-study student. Services include: computerized searches of the ERIC system, circulation of PREP Kits, circulation to clients of the ERIC microfiche collection (1968-present), hard copy and fiche duplication when necessary, access to local resources, which include university libraries, university personnel, State library, Historical Society, local research libraries, and a personalized reference and information service. SEA consultant services to LEA personnel are arranged on request by project staff.

ABSTRACT

Title - Technical Assistance to Rural Schools in
Knowledge Utilization; Utah Pilot Program
for Information Dissemination: Proposal
for Continuation Funding

Principal Investigator: Kenneth P. Lindsay
Contracting Agency: Utah State Board of Education
Federal Funds Requested: $100,000.00
Beginning Date: July 1, 1972
Ending Date: June 30, 1973

The Utah Education Agency requests that the United States Office of Education, National Center for Educational Communication, partially fund "Technical Assistance to Rural Schools in Knowledge Utilization" project for an additional twelve months to continue operations of this Pilot State Program for Information Dissemination.

The Pilot Program was originally funded in July, 1970 for a period of two years. The Pilot Program is operated as an arm of the State Superintendent of Public Instruction. The Project Director is answerable directly to the Deputy Superintendent of Instruction Services.

Inherent in the Pilot Program is the concept that the State Education Agency can assume a vital leadership role in the development and operation of an information service to assist educational managers and practitioners. The encouragement of educational practice improvement is accomplished by providing educators with professional and technical information and assistance to aid in the installation of new programs, the development of new procedures, and the improvement of existing practices at both the state and local level. A major purpose of the Program has been to develop an effective and efficient linkage between information sources and educational personnel. Pertinent and valid research information is provided to individual requestors in a format which aids in achieving designated objectives.

The proposal to partially fund an additional twelve months of the Pilot Program is consistent with the goals of the Office of Education and the indicated wishes of the school districts of Utah. With funding for an additional twelve months, the value of the pilot effort would be enhanced. Those who follow the development of the Pilot Program would have data from a three year operation which would allow the identification and testing of procedures which have proven to be successful in solving educational problems through information utilization. It is the wish of the Utah State Board of Education that this pilot effort in information dissemination be continued.

As a result of the Pilot Program for Information Dissemination many new programs have been introduced to school districts throughout the state. The Program is demonstrating that bringing the practitioner in contact with educational research assists the educator to identify and make rational choices among alternatives which can reasonable be expected to produce significant gains in learning.

Continuation funding is requested to meet the following goals:

1. Establishment of an institutionalized Field Agent program.
2. Testing the feasibility of expanding the dissemination project to larger urban districts within the state.
3. Providing computerized ERIC searches (and the necessary research support for Field Agents) through the Utah State Education Agency.

FINAL WORD

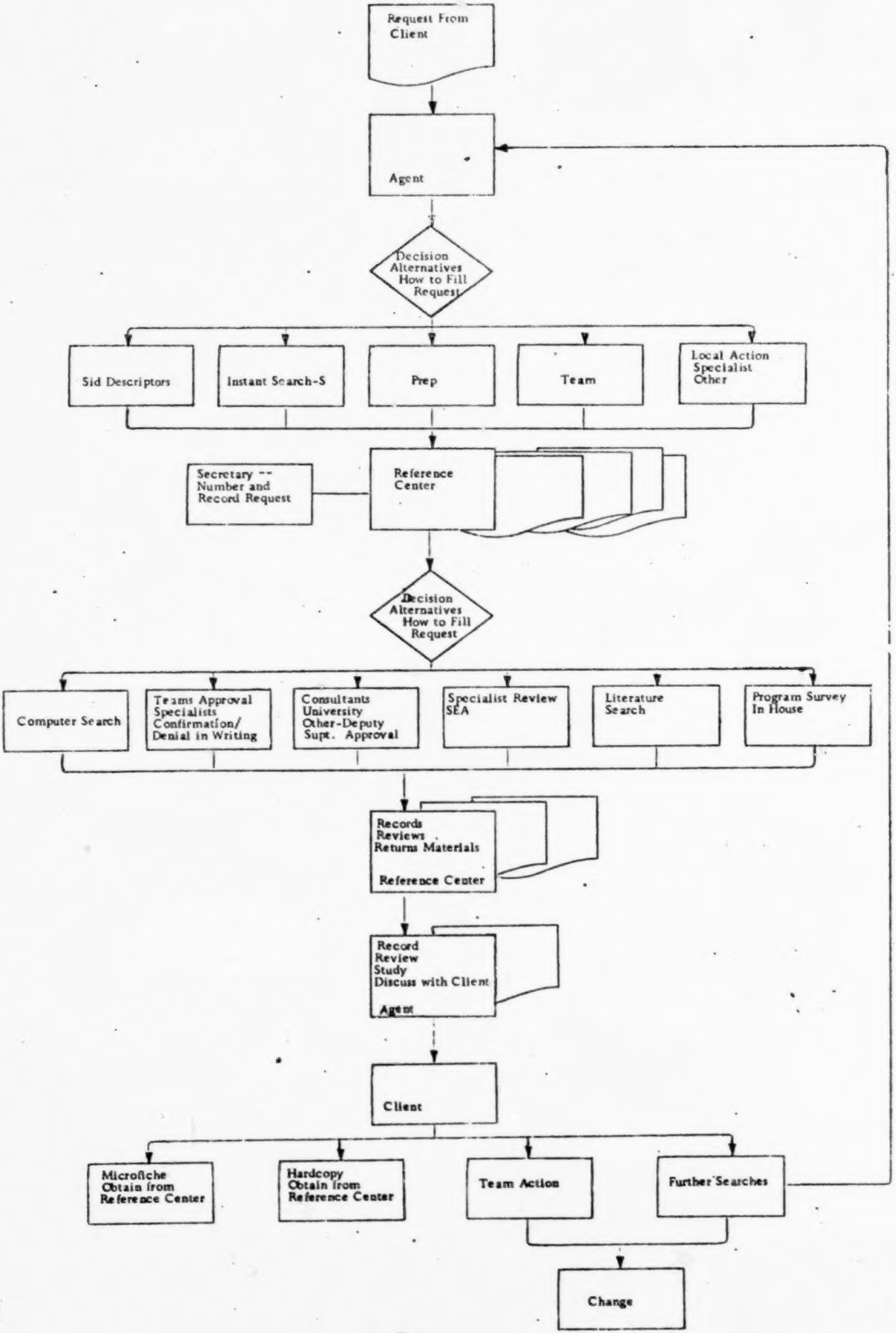
The October Quarterly Report will illucidate the progress toward the tasks outlined in the Addendum.

As of this writing the computerized system for searching the ERIC tapes developed by Dr. Edward Krahmer is being installed. An information retrieval agent position has been developed and the actual running of the searches and testing the system will be initiated.

Each agent is in a different stage of identifying new district agents and this will proceed more rapidly as we get the computer system up and running, and the IDIs completed.

Candidates for the "urban district" have come forth and the project is in the selection process of this task.

The day to day operational tasks noted in the Addendum are proceding as time permits.


Request From Client
Agent
Decision Alternatives How to Fill Request
Sid Descriptors
Instant Search-S
Prep
Team
Local Action Specialist Other
Secretary -- Number and Record Request
Reference Center
Decision Alternatives How to Fill Request
Computer Search
Teams Approval Specialists Confirmation/ Denial in Writing
Consultants University Other-Deputy Supt. Approval
Specialist Review SEA
Literature Search
Program Survey In House
Records Reviews Returns Materials
Reference Center
Record Review Study Discuss with Client
Agent
Client
Microfiche Obtain from Reference Center
Hardcopy Obtain from Reference Center
Team Action
Further Searches
Change

Interim Report

Contract No. OEC-0-70-4741

Kenneth P. Lindsay
Utah State Board of Education
1400 University Club Building
136 East South Temple
Salt Lake City, Utah 84111

UTAH'S PILOT STATE DISSEMINATION PROGRAM

December 1972

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Office of Education

National Institute for Education

Interim Report

Contract No. OEC-0-70-4741

UTAH'S PILOT STATE DISSEMINATION PROGRAM

Kenneth P. Lindsay

Utah State Board of Education
1400 University Club Building
136 East South Temple
Salt Lake City, Utah 84111

December 1972

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
National Institute of Education

PREFACE

It is the sincere hope of the Utah Technical Assistance Project that this interim report will stand not only as a record of the activities in which the project has engaged for the past two and one-half years, but that new projects of this type will gain from our successes and mistakes and that the references given may save time, "reinvention of the wheel" and frustrations.

Though we have been in this business for several years, we are still a "pilot" project in that the things with which we must cope are still very new to us. We are still feeling our way into the future. We are sincerely appreciative of the many new resources that are now available to projects like ours.

We are sincerely grateful to all those who have assisted us so generously in the past:

Dr. Walter D. Talbot, State Superintendent of Public Instruction, Utah State Board of Education.

Dr. Lerue Winget, Deputy Superintendent, Office of Instruction Services, Utah State Board of Education.

Personnel of the Utah State Board of Education.

Mr. Jerald S. Hawley, Mr. David Church, Mrs. Ruth Nielsen, Mr. Norman Kohler and Dr. Robert Hanson, our Field Agents.

Dr. Charles Koelling, Dr. Carl Fehrle, Dr. Randal Price, Dr. William Hoff, Dr. Glen White, Dr. Larry Hale, and Dr. Dan Doell, the Training Team from the University of Missouri.

Dr. Sam Sieber, Ms. Loya Metzger and Ms. Karen S. Louis, the Evaluation Team from the Bureau of Applied Social Research, Columbia University.

Dr. George Katagiri, Director, and the personnel of the Oregon Project.

Dr. W. E. Ellis, Director, and the personnel of the South Carolina Project.

Dr. Robert Brickley and Ms. Carolyn Trohaski, Directors, of the Research and Information Services for Education.

Dr. Walter Turner, Mr. William McCleary and the personnel of the Northern Colorado Educational Board of Cooperative Services.

Appreciation and thanks also to the many other Centers whom we have written and called and who have responded with resources, materials, kind words, and encouragement. We hope we will be able to add to the good relationships engendered among the network of information centers.

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CHAPTER I

INTRODUCTION

Statement of Problem

National and Local
Implications

TECHNICAL ASSISTANCE TO
RURAL SCHOOL DISTRICTS IN KNOWLEDGE UTILIZATION

The Problem:

In 1941 Paul Mort's studies indicated a fifty-year gap between research in education and application in the classroom.[1] In 1969 a research study by the Stanford Research Institute for the Far West Regional Educational Laboratory concluded, "One of the most critical problems which confronts the field of education today is that of translating research results into practice."[2] Recently, a congressional subcommittee found that it takes thirty years before an innovation in education has widespread adoption.[3] Goodlad, Cunningham, Brickell, and Goldhammer have all developed the thesis that change in our schools comes very slowly, even reluctantly.[4]

Nowhere in our educational system is this gap between what we do and what we know so pronounced and so critical as in small rural schools. Studies over the years have pointed out the fact that rural schools are generally less adaptable, less responsive to change than are other schools.[5] A national survey of accredited high schools has found that small schools were the least innovative, the most resistant to change.[6] This does much to explain the finding of the President's National Advisory Commission on Rural Poverty that "Rural adults and youth are the product of an educational system that has historically shortchanged rural people." The extent to which rural people have been denied equality of educational opportunity is evident from both the products of the educational system and the resources that go into the system. On both counts the quality of rural education ranks low.[7]

The problem does not lie in the lack of knowledge available to the schools. In the past few years knowledge sources have multiplied in the form of R & D centers, Title III projects, Regional Educational Laboratories, ERIC centers, University research and development, private information systems and centers, and small school improvement projects such as Western States Small Schools Project. The problem lies rather in the lack of knowledge utilization by schools. Not only is there a gap between what we know and what we do in education generally, there is a critical gap between what we know and what we do about educational change and what we do to bring about such change to reduce the general gap.

On one hand, are the potential information users, often apathetic about seeking new knowledge,[8] and on the other knowledge sources ready to be used. What is needed are institutional mechanisms that can make use of the growing base of knowledge about change (Havelock reports some 4,000 separate reports[9]) to make knowledge seekers of the users and to link these users to the knowledge sources.

While it is true that there is a continuing need for new knowledge about the change process just as there is a need for new knowledge about education generally, it is imperative that the growing body of knowledge about change be utilized now in the attempt to improve education. Although models for change may differ (Havelock points out such differences illustrate equally important aspects of a total process[10]) most experts in educational change agree that the link between inventor and user is one of the weakest interfaces in our educational system[11]. Havelock has stated that "what we do not have and what we need so badly is a network of regional centers which can serve as truly comprehensive resource centers and resource linking centers with the skills and the staff to be an effective mediating mechanism between R & D on the one hand and operating school districts on the other."12 Thomas D. Clemens has effectively made the case for the State Educational Agency to perform this role. He states that "what is really lacking is concerted efforts to 'engineer' this knowledge into techniques, procedures, and guidelines for action. In a very real sense, the work of State agency personnel is general and dissemination personnel in particular is to engage in such engineering."[13]

Into this state of affairs the year 1970 dawned. This year was to see the actual "happenings" that were designed to begin correcting the situation that had for many years been discussed and had produced volumes of print pros and cons---getting research information into practice.

On May 4, 1970 the Office of Information Dissemination, which had been established by the U. S. Office of Education, was reorganized and renamed. The new title was the National Center for Educational Communication.

> NCEC: A new concept in educational communication.
> Education and its improvement are based on communication. To furnish leadership and support to strengthen educational communication throughout the country the Office of Education has established a National Center for Educational Communication(NCEC).

NCEC consisted of two divisions: The Division of Practice Improvement and Division of Information Resources, which include ERIC, The Educational Materials Center and the Educational Reference Center. The Copyright program was also included in NCEC.

NCEC objectives and programs were as follows:

Accelerate the spread of exemplary programs and validated practices.
  Provide information nationally about validated exemplary programs.
  Increase interpersonal communication about improved practices.
  Achieve faster nationwide use of tested products from major educational development efforts.
  Facilitate commercial marketing of materials through the OE copyright program and the Publishers Alert Service.

Develop national communication linkages for effective application of knowledge and improved practices.
  Encourage State-Federal communication planning and liaison activities.
  Support pilot communication programs for serving local needs.
  Provide technical assistance for development of dissemination and application programs.

Coordinate OE communication efforts with those of professional, commercial, and other private organizations.

Assure access to current educational knowledge.
    Maintain information storage, retrieval, and dissemination services through the Educational Resources Information Center (ERIC).
    Utilize the information resources of the OE Educational Materials Center (EMC) with its display of books currently available for schools and teacher education programs.
    Provide new services through the OE Educational Reference Center (ERC), a model one-stop information center with reference and demonstration services and on-line capability.
    Support pilot regional centers to provide computer searches of the ERIC report literature for local schools.
    Make ERIC master magnetic tape files available.

Disseminate interpreted information on priority educational topics.
    Support information analysis activities through interpretive summaries and bibliographies produced by the ERIC Clearinghouses.
    Continue the OE Target Communications Program for decision-makers and practitioners with emphasis on Putting Research into Educational Practice (PREP) for widespread dissemination of information at low cost.

Develop and articulate OE communication efforts.
    Support Research and Development in educational communications systems.
    Develop and test communication models and strategies.
    Coordinate planning and development of OE communication resources.

To accomplish these objectives NCEC funded, in 1970, Utah, Oregon and South Carolina to act as pilot states for the development and operation of an information dissemination program. The purpose of the pilot projects is to develop, test, and demonstrate ways in which state educational agencies can furnish local educators with the information they need to do their jobs better. Each pilot project requires the development of state agency information resource and retrieval services which provide the back-up support to full-time field agents who live and work with local educators. These field agents help teachers, principals, specialists and others specify their information needs and introduce them to a range of relevant information and alternative programs and practices. After the field agent has received information from the SEA retrieval unit he helps his client derive implications for action or select promising alternatives to current practices. In addition, where appropriate the field agents try to improve communications between school districts, arrange for state, local, or university consultants and inaugurate inservice programs. The major objective was, and is, of each of the three states to develop an effective and efficient linkage system between information sources and educational personnel and to operate a model which is uniquely suited to identifying educational information needs relating to the goals of each state.

NCEC - Today

With the passage by Congress and the signature by the President of the 1972 Education Ammendments Bill, the National Center for Educational Communication and its dissemination functions are transferred to the new National Institute of Education (NIE). NIE and the Office of Education comprise the Division of Education headed by an Assistant Secretary for Education, in the Department of Health, Education, and Welfare. As the major Federal agency for educational research and development, NIE is responsible for the R & D activities previously administered by OE and will work to bring about coordination of educational research among the Federal agencies. NIE will conduct in-house and contracted research, both basic and applied, and will disseminate the results of that research to educational systems at all levels throughout the nation. Its basic aims are......*to bring about those scientific inquiries into the learning process which will best promote equal educational opportunity for all Americans....*to identify reforms which will alleviate the problems of American education....*to advance the practice of education, as an art, a science, and a profession....*to build an effective educational research and development.

The interim organization of NIE is based on a series of Task Forces, one of which focuses on dissemination. NCEC staff comprise this task force which is headed by Lee G. Burchinal, former head of NCEC. Formal organization of NIE will follow appointment of the NIE director.

The NIE Task Force on Dissemination* and the Utah Technical Assistance Project are now going on three years of age. The mission, tasks and activities of the two programs have been closely related. This interim report will detail, chronologically, the birth and, as far as possible, development of the Technical Assistance Project to the present time, November 1972.

---

*The new term NIE Task Force on Dissemination is used throughout this report to refer to the former NCEC.

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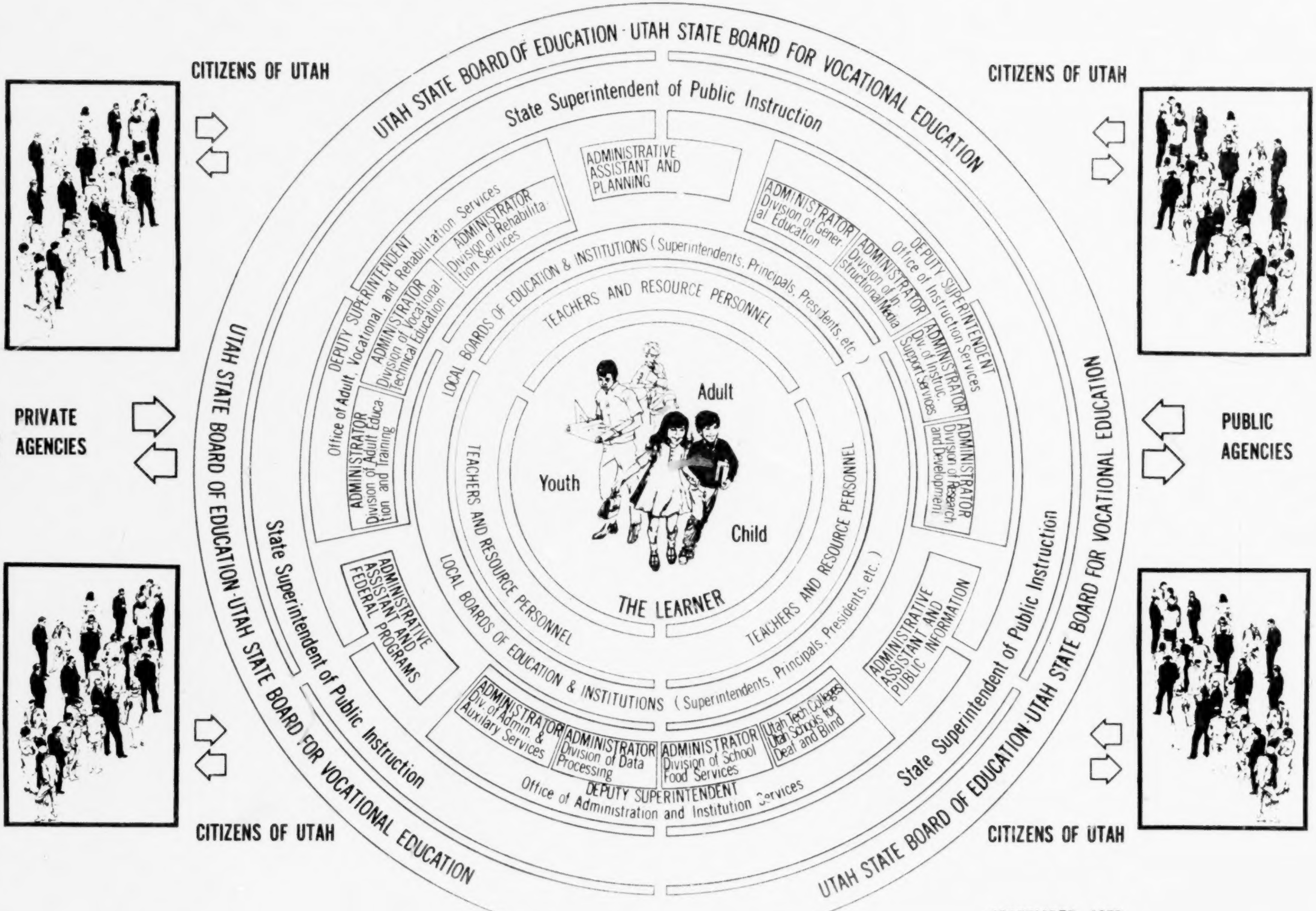
12. Havelock, *op*. *cit*.
13. Thomas D. Clemens, "The State Education Agency as a Facilitator of Educational Change," 1970.
14. Havelock, *op. cit*.

Utah State Board of Education Organizational Chart


CITIZENS OF UTAH
CITIZENS OF UTAH
PRIVATE AGENCIES
PUBLIC AGENCIES
CITIZENS OF UTAH
CITIZENS OF UTAH
UTAH STATE BOARD OF EDUCATION · UTAH STATE BOARD FOR VOCATIONAL EDUCATION
UTAH STATE BOARD OF EDUCATION · UTAH STATE BOARD FOR VOCATIONAL EDUCATION
UTAH STATE BOARD OF EDUCATION · UTAH STATE BOARD FOR VOCATIONAL EDUCATION
State Superintendent of Public Instruction
State Superintendent of Public Instruction
State Superintendent of Public Instruction
ADMINISTRATIVE ASSISTANT AND PLANNING
DEPUTY SUPERINTENDENT Office of Instruction Services
ADMINISTRATOR Division of General Education
ADMINISTRATOR Division of Instructional Media
ADMINISTRATOR Div. of Instruc. Support Services
ADMINISTRATOR Division of Research and Development
ADMINISTRATIVE ASSISTANT AND PUBLIC INFORMATION
DEPUTY SUPERINTENDENT Office of Administration and Institution Services
Utah Tech. Colleges Utah Schools for Deaf and Blind
ADMINISTRATOR Division of School Food Services
ADMINISTRATOR Division of Data Processing
ADMINISTRATOR Div. of Admin. & Auxiliary Services
ADMINISTRATIVE ASSISTANT AND FEDERAL PROGRAMS
DEPUTY SUPERINTENDENT Office of Adult, Vocational, and Rehabilitation Services
ADMINISTRATOR Division of Adult Education and Training
ADMINISTRATOR Division of Vocational-Technical Education
ADMINISTRATOR Division of Rehabilitation Services
LOCAL BOARDS OF EDUCATION & INSTITUTIONS (Superintendents, Principals, Presidents, etc.)
LOCAL BOARDS OF EDUCATION & INSTITUTIONS (Superintendents, Principals, Presidents, etc.)
TEACHERS AND RESOURCE PERSONNEL
TEACHERS AND RESOURCE PERSONNEL
TEACHERS AND RESOURCE PERSONNEL
Adult
Youth
Child
THE LEARNER

SEPTEMBER 1972

CHAPTER II

DEVELOPMENT OF THE UTAH PILOT STATE DISSEMINATION PROJECT

Original Funding Proposal

Havelock Model

Objectives

Staffing - Personnel

Relationship to State Agency

Resources

Training

Evaluation

Activities

APPENDIX:

Chart

Personnel

Relationship to State Agency

Training Pages and Materials

Budget

Vitas

DEVELOPMENT OF THE UTAH PILOT STATE DISSEMINATION PROJECT

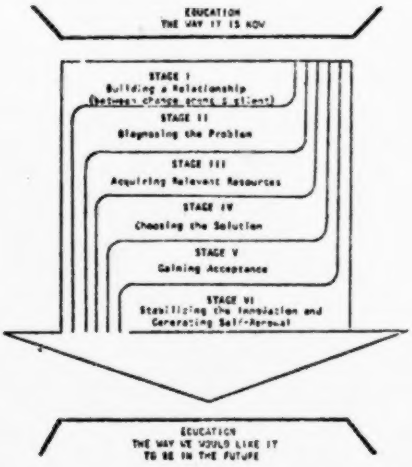
Original Funding Proposal

The original funding date was June 25, 1970 to June 24, 1972. An Abstract of the original proposal reads:

> "This project will test over a two year period a model for increasing knowledge utilization on the part of small rural schools. The model is based on the work of Dr..Ronald Havelock and provides that the Utah State Educational Agency becomes a resource linking center between the local districts and nationwide sources of relevant information. A Reference Center and Reference Center Manager at the SEA will provide linkage of the SEA to resource systems. Resource Agents at Cooperative Service Centers will provide linkage between SEA and local districts.
>
> The installation of this model should provide for greater and more effective knowledge utilization and thus improved education in rural schools in Utah. It provides for the institutionalization mechanisms based on the most recent information on the change process to affect change in rural districts.
>
> The model will be tested in districts operating small rural schools where systematic knowledge utilization for the imporvement of education is weakest.
>
> The project will test the consequences to rural schools of the installation of this model and the effect of the model on the functions and operation of the State Educational Agency."

Specifically the project was to test the Havelock Model, as a method of reaching the over-all goal. The most important part of the Havelock Model is the advocation of the change agent or field agent. Illustrated below is the Havelock Model for effecting change.

Change Agent as Process Helper


EDUCATION
THE WAY IT IS NOW
STAGE I
Building a Relationship
(between change agent & client)
STAGE II
Diagnosing the Problem
STAGE III
Acquiring Relevant Resources
STAGE IV
Choosing the Solution
STAGE V
Gaining Acceptance
STAGE VI
Stabilizing the Innovation and
Generating Self-Renewal
EDUCATION
THE WAY WE WOULD LIKE IT
TO BE IN THE FUTURE

Inherent in the pilot program was the concept that the State Education Agency could assume a vital leadership role in developing and operating an information service to assist educational managers and practitioners. The improvement of educational practice was to be encouraged by providing educators with professional and technical information and assistance to aid in the initiation of new programs, the development of new procedures and the improvement of existing practices at both the state and local levels. The basic design for this program stipulates that interpersonal communication links are essential. This significant experiment is being conducted to determine the extent to which a Field Agent (i.e., Education Extension Agent) devoting full time to working in a target area affects the utilization of educational information and resources. Employing the Field Agent concept is an attempt to maximize interpersonal communication linkage at the district level in order to facilitate the educational improvement process.

Communication linkage within the State Education Agency is also being stressed. The pilot program is coordinating the work of the Field Agents (EEAs) in the target areas with the resources available within the Agency. Consultants and technical assistance teams are working with the Field Agents (EEAs) on identified needs of the district and staff. In addition, the pilot program provides a professional service to the SEA personnel by permitting them to tap the resources available through the information service for the latest developments in their field. Basically, the pilot program was designed to coordinate, strengthen and supplement the ongoing activities of the State Education Agency as it seeks to assist in the improvement of education practice.

The Objectives of the original proposal are as follows:

General Objective A

The project will establish a reference center within the State Education Agency and build the reciprocal relationships necessary for successful linkage of the resource and user problem solving strategies.

Specific Objective A1

The Reference Center will identify a minimum of two resources in at least 100 categories of school concern well enough to document their success potential over known alternatives.

Specific Objective A2

The Reference Center will cross reference all resources well enough that a suggested management process is available with any content package or technique identified in the center.

General Objective B

The project will develop the necessary storage and retrieval capability to respond with at least two alternative resources with a miximum turn around time of two days.

Specific Objective B1

The Reference Center will develop or identify a procedure for coding and storing accumulated information well enough that a specific request can be categorized and relevant abstracts made available in hard form within one week.

Specific Objective B2

The Reference Center will make provision for compatability of storage and retrieval format so as to be compatible with the Utah Educational Data Processing Center in such a way that hard form may be either tape or printout.

General Objective C

The project will influence staff role perceptions so as to include at least 10% of each staff members time as a technical assistance team member.

Specific Objective C1

Five staff members of the Utah State Educational Agency who have received technical assistance training at random will successfully and typically differentiate their role as a technical assistance team member and their role as a specialist when asked for a written description of their jobs.

Specific Objective C2

Five staff members of the Utah State Educational Educational Agency who have received technical assistance selected at random will voluntarily enymerate at least two benefits to local districts accruing from their activity as a technical assistance team member when interviewed concerning that part of their job responsibility.

General Objective D

The project will establish a formal structure and personnel necessary for the linkage between educational resources and educational product consumers without violating the principles of the Havelock Model.

Specific Objective D1

By September 1, 1970 the organizational arrangements, the personnel of the Utah State Educational Agency and of three regional resource centers will have developed such that a district or school official, teacher, or student could request assistance on an educational problem and a person in a regional center would recognize and assume responsibility for reacting to that request. Within one week the requestor would have some hard relevant material concerning the problem in hand as well as a suggested technical assistance team to consider using in the solution of the problem at hand. Further, the printed material would have come through the efforts of a coordinator who tapped a reference center resource.

Specific Objective D2

Given a hypothetical or real educational problem description, the project coordinator could produce in two days at least two samples of relevant resource help down from the Reference Center and the logical technical assistance team configuration and mission. He further could describe in uniting the process of bringing the resource material, the TA team and the user together and the role the resource agent from the regional center would play.

General Objective E

Resource agent at each of three regional centers will develop in an identified step-by-step progression, a working relationship with people in regions, districts and schools. The relationship will become a working relationship when it can be documented by a coded log of the relationship activities which will begin with awareness (coded lowest) and develop through Ad Hoc cooperation (coded mid point) and eventually reach teamed problem solving (coded highest).

Specific Objective E1

Any resource agent asked will produce a documented log of at least twenty awareness activities, ten Ad Hoc cooperation activities and one teamed problem-solving activity involving himself, TA teams, project coordinator and reference center manager and district administrators, teachers or students by June 30, 1971.

Staffing:

Project personnel will consist of:
- Technical Assistance Coordinator (Project Director)
- Reference Center Manager
- Project Resource Agents - 3 initially
- Project Auditor
- Secretary
- Half-time Secretaries for Agents

(See Appendix - Personnel)

Relationship to the State Education Agency:

To accomplish the objectives of the project certain organizational changes were made in the State Education Agency.

It was deemed wise to not assign the project director to any of the Divisions of the State Education Agency but rather place him physically in the Administrative wing of the office and make him directly answerable to the Deputy Superintendent, Office of Instruction Services, (see Organizational Chart, Appendix). It was the desire of the State Superintendent to make knowledge utilization an integral part of the mode of operation of all of the divisions of the State Education Agency.

The Reference Center was placed with the Instructional Media Division so that the facilities and capabilities of that division would be readily available to the Reference Center Manager.

All personnel were directed by the State Superintendent to reserve a minimum of 10% of their time to serve in the rural areas on Technical Assistance assignments.

Four Regional Service Centers, funded by the State Legislature, provided educational services to twenty-five rural school districts. These Service Centers are not intermediate units of the State Education Agency but rather voluntary cooperative centers organized and administered at the local level.

It was decided to physically locate the field or change agents in these Regional Service Centers and to allow the administering Board of the Service Centers (composed of the Superintendents of the participating districts) to: (a) select their field agents, (b) set their salaries, and (c) determine the details of their employment (length of vacation, travel allowance, employee benefits, etc.). These field agents were administerably responsible to their local boards, but answerable in program matters to the State project staff. Each of the agents were provided with a half-time secretary.

Early in 1970 Dr. Walter D. Talbot was named the new State Superintendent of Public Instruction, replacing Dr. T. H. Bell.

Dr. Talbot's first and major thrust as Superintendent was to attempt to make the State Education Agency a truly humanizing influence in Utah education. Leadership, service and control were designated as missions of the SEA staff by Dr. Talbot. It was his idea that the SEA be of "real" service to local school districts in as many ways as possible. The Technical Assistance Project was designed as a service project to help carry out this thrust by providing technical assistance in obtaining information related to problems educators might have and if necessary provide technical assistance teams to aid in implementation, thereby assisting local districts in developing their leadership roles.
(See Appendix - The Utah State Educational Agency)

Resources:

Resources available to the project at its inception were:
Northern Colorado Educational Board of Cooperative Services supplied the ERIC computerized searches.
State Board of Education personnel - General Education, Media, etc.

Training:

The Pilot project was to be trained by the agency selected by NCEC to conduct the training courses for all three Pilot projects. The University of Missouri, under the leadership of Dr. Charles H. Koelling and Dr. Carl C. Fehrle, was to provide this training.
(See Appendix - Development of the Utah Pilot State Dissemination Project -- Training)

Evaluation:

Evaluation of the Pilot State Program in dissemination was to be handled by a group selected by NCEC. Columbia University, under the direction of Dr. Sam Sieber, Ms. Loya Metzger and Mrs. Karen S. Louis, was awarded this contract.

Summary of activities at the beginning of the Project:

July 1970 - Reference Center Manager was hired and sent to Boulder for two week training of the Boulder system.

August 1970 - Dr. Kenneth Lindsay was named Coordinator of the Technical Assistance Project.

August 1970 - Mr. Jerry Hawley, Mr. Norm Kohler, Dr. Voyle Munson, and Dr. Robert Hanson were named as Resource Agents. (See Appendix , Vitas)

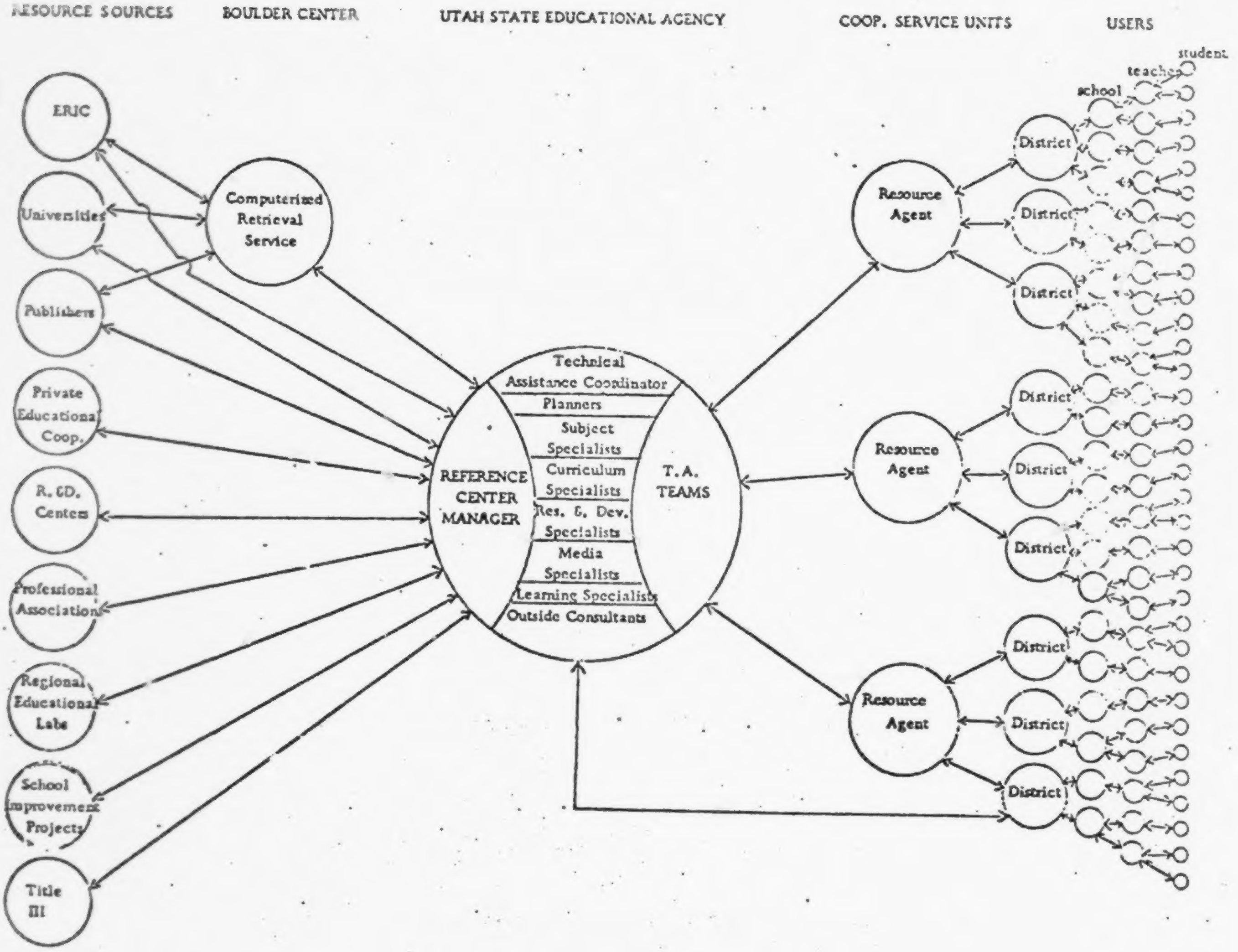
August 1970 - First meeting of Dr. Lindsay, Kathy Wallentine and the three original agents in the SEA. Dr. Lindsay described the Havelock Model. The procedures for taking requests was discussed as well as the indexes and Boulder's request form.

September 1, 1970 The skeletal process of information retrieval was initiated, with several requests by this date.

Initiating Activities:

1. Agent collect information request from client.
2. Forward requests to Reference Center.
3. Reference Center record and review request.
4. Reference Center forward requests to Boulder.
5. Search packets returned to Reference Center.
6. Reference Center record and review.
7. Reference Center return packets to agent.
8. Agent record then deliver packets to clients.

APPENDIX


RESOURCE SOURCES
BOULDER CENTER
UTAH STATE EDUCATIONAL AGENCY
COOP. SERVICE UNITS
USERS
student
teacher
school
ERIC
Universities
Publishers
Private Educational Coop.
R. &D. Centers
Professional Associations
Regional Educational Labs
School Improvement Projects
Title III
Computerized Retrieval Service
REFERENCE CENTER MANAGER
Technical Assistance Coordinator
Planners
Subject Specialists
Curriculum Specialists
Res. & Dev. Specialists
Media Specialists
Learning Specialists
Outside Consultants
T.A. TEAMS
Resource Agent
Resource Agent
Resource Agent
District
District
District
District
District
District
District
District
District

The model shows the user districts including students, teachers, and administrators grouped into three service areas, each served by a project Resource Agent. (In Utah 26 of the 28 school districts with rural schools are currently being served by four cooperative service centers. This Resource Agent provides the linkage between the school districts and the SEA. The SEA assumes the role of a regional center providing the linkage to national and state knowledge sources.

C. Personnel

1. The Technical Assistance Coordinator (Project Director)

The position of TA Coordinator who will also be the Project Director, will be established in the agency. This Coordinator will be a member of the SEA staff. His role is to direct and coordinate the project; establish the reference center and coordinate the work of the Resource Center with Technical Assistance Team and district requests; plan with and support the efforts of the Project Resource Agents; organize and coordinate the work of the Technical Assistance Teams; and monitor and provide for management and evaluation of the project.

2. Reference Center Manager

The position of the Reference Center Manager will be established in the agency. He will be a member of the SEA staff. His role is to establish and maintain adequate linkages to resource systems. He will react to requests from the TA Coordinator, Technical Assistance Teams, Resource Agents, and also to direct requests from districts.

3. Project Resource Agents

Three Project Resource Agents will be placed, one each, on the staff of three Cooperative Service Units in Utah. In the second year of the project, a fourth Resource Agent will be placed on the staff of an additional service at state expense. They will be the link between clusters of LEA's and the SEA. To provide such linkage, the Resource Agent will be essentially a staff member of a cluster of LEA's.

He creates awareness on the part of LEA of the resources and assistance available through the SEA. He encourages the LEA's to seek help, first on an Ad Hoc basis, and help with projects and eventually with assistance in problem solving and planning. He facilitates the LEA's requests for help and the SEA's response.

4. Project Auditor

The Project Auditor will be the key person in the formative evaluation of the project. His duties will be: (1) to analyze personnel logs and code them; (2) to debrief at regularly scheduled meetings the TA Coordinator, the Reference Center Manager, and the Resource Agents; (3) interview a random sample of users to validate the logs and debriefings; (4) document his analysis of the logs and debriefings; and (5) interview a random sample of SEA staff to assess their growth in the project. He should be well trained in the sensitive human relationships and processes involved in technical assistance. He will be a person external to the operation of the project.

B. The Utah State Educational Agency

The role of the USEA in this model will be to serve as a resource linking center with the staff and skills to be an effective mediating mechanism between the school districts and the resource systems and as a resource to school districts in technical assistance in problem solving and solution design.

To aid the USEA in these roles, the project would provide a Technical Assistance Coordinator who would also serve as project director, as a member of the SEA staff; a Reference Center Manager as a member the SEA staff; and three project Resource Agents, one each on the staff of three of the presently existant cooperative service centers in the state. In the second year of the project, a fourth Resource Agent will be provided to serve a fourth center at state expense.

As a resource linking center the SEA will build and maintain adequate linkage to resource systems. This function will be the task of the Reference established in the SEA. The Reference Center will consist of a Reference Center Manager, a file, and, where needed, TA Teams designated by the Technical Assistance Coordinator. The Reference Center Manager will develop an awareness of potential resource systems, determine their accessibility, their relevancy and their potential. He will contact the most relevant and accessible of these resources and initiate two-way interchanges with them. He will test the actual resource giving capacity of these outside resources. One resource he will exploit in the fullest is the computerized resource retrieval project at Boulder, Colorado. This center, under a Title III grant, will be serving the USEA during the 1970-71 school year. It has programed all ERIC information as well as all Colorado State Library materials and all major University resources in Colorado. He will also identify and establish communications with resources such as universities, school improvement projects, and Title III projects. Finally, he will inventory the resources available in the SEA in terms of help in identifying and assessing outside resources and in providing agency expertize in serving clients. As a result, he will be able to respond to district and SEA needs effectively with information and resources.

A second aspect of the USEA's role as a linking resource center will be that of building and maintaining linkage to the rural schools of the state. The Coordinator of Technical Assistance and the three Project Resource Agents, who will train in a cooperative venture with USOE and other states, are the key personnel in implementing this role of the USEA.

The Project Resource Agent as a member of the Staff of the Cooperative Service Unit serving the rural districts will be in a strategic position to establish rapport with district personnel. He will be in effect an employee of the district, under the control of the district. He will not represent an imposition of authority from an outside agency. He will be sensitive to local needs and, in order to improve his own effectiveness, will informally assess the districts to be served in terms of their resources and needs, their current levels of competency in problem solving and resource retrieval. He will use as his guide in establishing linkage the Havelock model of creating awareness, responding to Ad Hoc requests, and eventually create a trust and recognition whereby he can move to a serious dialogue on problems to comprehensive collaboration, planning, and problem solving. He must understand thoroughly the total system and his role in it. He must in effect know what the system is shooting for and use Ad Hoc requests as a leverage toward this goal. Although the Resource Agent will be a member of the Staff of the local Cooperative Service Unit, his role as described here will be protected since a condition of the project will be a commitment on the part of the Cooperative Service Unit and its participating districts to quarantee this role during the duration of the project.

The Technical Assistance Coordinator will assume responsibility for proper functioning of all components of the system including necessary technical assistance to the districts to effect the linkage between user and resource. The TA Coordinator, working directly under the Deputy Superintendent for Instruction, will organize and coordinate the work of Technical Assistance Teams consisting of appropriate SEA staff members, and, when necessary, outside consultants to provide special competencies not presently available on the SEA staff. These TA Teams will serve the districts as required in response to Ad Hoc requests, in helping provide competencies in planning or problem solving, in helping design solutions and in organizing and making usable to the districts information retrieved from outside resources. In addition to this responsibility of providing a smooth linkage of districts to resources in the form of information and assistance, the TA

Coordinator will be responsible for involving the SEA staff in the project, in providing the "linkage" between the project and the SEA staff. He will follow progressive steps for insuring SEA staff cooperation from creating awareness, through Ad Hoc cooperation on to teamed problem solving.

Technical Assistance would be provided the district in two ways: Assistance in problem solving or planning and assistance in resource retrieval and solution design. Technical assistance in problem solving or planning is not a part of this proposal although it is a part of the mode. Present capabilities and resources of the SEA will be utilized to provide this type of technical assistance. The present planning capabilities of the SEA are adequate and available for this task. In a word, the SEA will create knowledge seekers at the user level from resources other than those of the proposed project. The planning capabilities and funds of the SEA will be coordinated with the project. Project resources will be involved in providing technical assistance and linkages for knowledge utilization only.

The resources the Utah State Educational Agency makes available to this project are staff members with competencies in planning and problem solving, subject matter, media, and linkages with resource systems; a statutory position as the agency responsible for education in the State; a unique position to provide educational leadership in the state; a unique position as a source of expert advice and staff service to the state government; its regulatory function over education in the state; and its role in educational finance in the state. All of these resources provide potential leverage in encouraging districts to plan, in stimulating districts to utilize knowledge, and for establishing a true SEA-LEA partnership in education.

SECTION I

DEVELOPMENT OF THE UTAH PILOT STATE DISSEMINATION PROJECT

E. TRAINING

The Pilot State Dissemination Project was originally conceived to include three states in a Pilot effort in dissemination with an outside agency responsible for training and a second outside agency responsible for evaluation.

The agency awarded the contract for training was the University of Missouri at Columbia, Missouri. Their staff included:

Dr. Charles H. Koelling, Director
Dr. Carl C. Fehrle, Associate Director
Dr. Larry Hale, Field Agent Specialist
Dr. Randel Price, Field Agent Specialist
Mr. William Hoff, Retrieval Specialist
Mr. Glenn White, Retrieval Specialist

The first training session held October 19-23, 1970, in Columbia, Missouri (Agenda is Appendix D of this document) explored the problems of bringing about change as seen by the Missouri staff. The training was general in nature and consisted of many presentations dealing with the theory of the change process.

The second training session was held in Salt Lake City, Utah, March 3 - 4, 1971 (see Agenda, Appendix E). This workshop featured a simulation exercise as the strategy for helping people with different job assignments to learn the functions of other project personnel.

The third general training session was held in Kansas City, Missouri, October 12-14, 1971 (see Agenda, Appendix F). Frank W. Mattas described his San Mateo program in addition to a program of activities which purported to respond to the felt training needs of the three Pilot States.

*Appendix-for further discription of the Training program see Final Report Project No. 0-0741 Pilot Training Project for Personnel Particiapting inPilot State Dissemination Programs-- ED 064 529

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	PRIVATE INSTITUTION		PUBLIC INSTITUTION			
☐ INDIVIDUAL	☐ PROFIT	☐ NON-PROFIT	☐ FEDERAL	☐ LOCAL	☒ STATE	☐ OTHER

NAME OF US OE OFFICIAL PREVIOUSLY CONTACTED ABOUT THIS APPLICATION, IF ANY

PROJECT DIRECTOR'S TIME COMMITMENT IF PROJECT IS FUNDED	PERCENT OF TIME	ENDING DATE	FUNDING AGENCY
TEACHING DUTIES *(If none, leave blank)*			
ADMINISTRATIVE DUTIES			
RESEARCH IN PROGRESS. TITLE OF PROJECT			
1.			
2.			
3.			
4.			
CONSULTANT SERVICES			
TIME PLANNED THIS PROJECT	100%	06/30/72	
OTHER			
TOTAL			

IF YOUR PROPOSAL IS A TRAINING PROJECT, COMPLETE THE FOLLOWING

A. TYPE OF PROPOSAL

☐ UNDERGRADUATE ☐ GRADUATE

☐ POST DOCTORAL ☐ INSTITUTE

☐ SPECIAL TRAINING PROJECT

☐ PROGRAM DEVELOPMENT

B. INSTITUTIONAL ALLOWANCE

1. BASED ON RATE PER TRAINEE

NUMBER OF TRAINEES	RATE	AMOUNT

2. TOTAL INSTITUTIONAL ALLOWANCE

C. TRAINEE SUPPORT

1. STIPENDS

NUMBER OF TRAINEES	STIPEND RATE	AMOUNT
SUBTOTAL		

2. DEPENDENCY ALLOWANCE

NUMBER OF DEPENDENTS	RATE	AMOUNT
SUBTOTAL		

3. TRAVEL RELOCATION COSTS

4. TOTAL TRAINEE COSTS

SECTION II– PROJECT COST ESTIMATES

TOTAL PROJECT COSTS *(Federal)*			First Year	Second Year
	PERSONNEL SALARIES	51	$ 76,750	$ 76,750
	EMPLOYEE BENEFITS	52	6,300	6,300
	TRAVEL	53	15,000	15,000
	SUPPLIES AND MATERIALS	54	3,175	3,175
	COMMUNICATIONS	55	0	0
SERVICES	DUPLICATING AND REPRODUCTION	56	3,000	3,000
	STATISTICAL	57	0	0
	TESTING	58	0	0
	OTHER	59	0	0
	FINAL REPORT	60	0	0
	EQUIPMENT	61	0	0
	TRAINEE COST *(C4 above)*	62	0	0
	INSTITUTIONAL ALLOWANCE *(B2 above)*	63	0	0
	OTHER DIRECT	64	0	0
	SUBTOTAL DIRECT COST	65	104,225	104,225
	INDIRECT COSTS	66	0	0
	TOTAL PROJECT COSTS	67	$ $208,450	

2.

VITA

Kenneth P. Lindsay

Home Address: 4773 South 1815 West
Salt Lake City, Utah 84118
Telephone (801) 299-0504

Personal Information: Married- Six children
Born- September 3, 1923
5'11" - 185 pounds

Social Security Number
523-52-5753

Professional Experience - 1948 to 1972

Classroom Teacher: Grantsville, Utah: Nuku'alofa, Tonga; Riverton, Utah; Sandy, Utah; Midvale, Utah. Taught Mathematics, Algebra, English, Social Studies, Health, Physical Education, Chorus, Religion. (1948-1966)

High School Coach: Coached football, basketball, baseball, track and tennis. (1948-1953)

Assistant Principal: One year, Jordan School District (1956-1957), and one year Liahona High School, Tonga (1957-1958).

High School Principal: Liahona High School (L.D.S.) School System) (1958-1963).

National Association of Secondary School Principals Administrative Intern (1966-67)

Administrative Assistant: To Dr. Glen Ovard, BYU, Experimental Education Programs. (1967-1968)

State Board of Education: (
Coordinator ESEA Title III, 1968 to present.
Coordinator Technical Assistance to Rural School in Knowledge Utilization (1970- present)
Member: Executive Committee.
Member: Planning Council.
Member: Administrative Council.

Consultant: Northwest Regional Education Laboratory

Consultant: Arizona Department of Education

Consultant: Oklahoma Department of Education

Consultant: United States Office of Education

Consultant: Worldwide Education and Research Institute

Member: Ad Hoc Advisory Committee for development of a Statewide System for Evaluation, Utah.
Member: Advisory Committee, "Development of Training Resources for Educational Extension Services Personnel:, Institute for Communication Research, Stanford University.
Member: Advisory Committee, An eight-state project on Consolidated Grants Management.
Member: Steering Committee, National Dissemination Project.

Field Reader: State Plans Evaluator, United States Office of Education.

Field Reader: National Center for Education Communication, U. S. Office of Education.

Field Reader: National Center for Educational Research and Development, U.S. Office.

Field Reader: Title III Proposals, Colorado Department of Education.

Education - Bachelor of Science Degree, Utah State University, 1948.

Doctor of Education Degree, Education Administration, Brigham Young University, 1970.

Activities and Interests -

A. Education: Member
- National Education Association
- Utah Education Association
- Local Education Associations
- Phi Delta Kappa
- National Association of Secondary School Principals
- Utah Association of School Administrators

President
- Utah State Office Education Association

B. Church (LDS):

Positions Held:
- Bishop
- Bishop's Counselor
- Counselor, Mission Presidency
- District President
- Branch President
- Missionary
- Aaronic Priesthood Advisor
- MIA Superintendent
- Scoutmaster
- Teacher in Many Auxiliaries
- Chorister
- Finance Committee

C. Community: Lion's Club

D. Sports: Participant & Spectator

E. Music: Performer & Conductor

F. Family: Central Focus of My Life.

NAME: Kathleen Wallentine

DATE OF BIRTH: February 25, 1969; Kennecott, Alaska

MARITAL STATUS: Married to Keith J. Wallentine, Director of Public Relations, U & I Sugar Company. Have four children: Elise-18, Julie-13, Craig-11 and Cynthia-10.

EXPERIENCE
AND
EDUCATION:

--Attended Elementary and secondary school in Salt Lake City.
--Graduated from University of Utah, 1951 in Elementary Education.
--Taught grade three for one year at Washington School, Salt Lake City.
--Remained at home 15 years to raise a family, during which time I took library courses and obtained an Elementary School Library Certificate.
--Returned to the Salt Lake City schools in 1966 as an elementary school librarian and worked for three years at the Edison School in Salt Lake City.
--Took a leave of absence to obtain a M. Ed. degree in Instructional Media and a Professional Media Certificate.

ACTIVITIES:

--Have been active in American Association of University Women and Friends of the Library Organizations.
--While a librarian, worked on district book committee and was given additional monetary remuneration for being a curriculum specialist within the school where I was teaching.

HOBBIES:

--Hiking, wildflower, Children's books, gardening, swimming, and reading.

Name: Jerald S. Hawley

Date of birth: October 31, 1937

Marital status: Married to Marilyn Stapley Hawley; two children: Britt, 5 years, Neil, 3 years

Education:

- --Graduated from South Sevier High School, Monroe, Utah, 1955
- --Attended College of Southern Utah 1955 to 1957
- --Graduated from Utah State University with BS degree in industrial technical education, 1964
- --Graduated from Utah State University with MS degree, 1965

JERALD S. HAWLEY, B.S., M.S.

- --Directory, Southwest Educational Development Center 1967 to date
- --Teacher, Cedar City High School, 1964 to 1967
- --Past President of Southern Utah Field Chapter, Phi Delta Kappa
- --President-Elect to AVID of Utah State Audiovisual Association
- --Member, Board of Directors, Educational Broadcasters of Utah
- --Listed in Who's Who in American Colleges and Universities, 1962-63
- --Fulfilled a mission for LDS Church to Norway

NORMAN KOHLER

Born May 30, 1939, in Heber City, Utah; a lifetime resident of Wasatch County, I attended Midway Elementary School and Wasatch Sr. High School, graduating in 1957.

After graduation my education was continued at B.Y.U. but was interupted for a time due to a mission call to Germany for the Church of Jesus Christ of Latter-Day Saints. During this mission time I acquired fluency in the German language.

Returning home my education was continued at B.Y.U where I obtained a B.S. degree in Social Studies in 1965. My study included 30 hours credit in History and 20 hours credit in my minor field of Physical Education. Since that time additional hours have been accumulated through Evening School. I now have approximately 50 hours in Social Studies. My plans include continuation of my schooling and acquiring a master's and maybe Phd.

I married the former Nan Van Wagoner in June of 1965. We have three children, Lynette, 5 years; Scott, 2 years; and Shelly 10 months of age.

Since 1965 I have been employed by Wasatch County School District as a Social Studies instructor. My experience has consisted of teaching 7th Grade Social Studies (Utah History), 8th Grade U. S. History and 9th Grade World Geography.

The past year in connection with other faculty members I have had the opportunity to investigate curriculum programs incorporated in the following communities: Nephi, Parowan, Cedar City, and Provo, Utah.

Positions of importance religiously and educationally that I have or am now holding are:

Religious:
Elders Quorum Presidency 1967-70, Ward Athletic Director YMMIA 1969-70, President of YMMIA 1962-66, Explorer Instructor 1962-67, Stake YMMIA Secretary 1963-66.

Education:
Wasatch Education Association Secretary 1968-70, member of Association Salary Committee 1968-69, Delegate to National Political Action Convention of Teachers of Utah in Salt Lake City, 1969, Chairman of Wasatch Education Association Political Action Committee, 1969-70, I have also held membership in Wasatch Education Association, Utah Education Association and National Education Association. KSL Teacher of the Day; [illegible], Sept. [illegible]

Community:
Member of Midway Boosters Club, I have also contributed services over the past 10 years to the community softball and baseball recreation programs for youth and adults.

[illegible]

Voyle L. Munson - - - - - Born May 19, 1919
Married Lillian Shurtz, August 11, 1939
Five children - - - Kathryn, 30; Kent, 24; Mary Lu, 17;
Robert Lynn, 15; Lorraine, 10.
Two grandchildren

Education:
Escalante High School, 1935
Branch A. C., Cedar City, 1935-37
BYU - - AB in English, 1937-39
Southern Illinois U., Edwardsville, Illinois, MS in Education, 1967-68
BYU - - - Ed. D. in Administration, 1970

Educational Experience:
Teacher, Marysvale High School, 1942-44
Teacher, Wayne High School, 1966-67, 1968-69
Vice-Principal, Provost Elementary School, 1969-70
(Administrative Intern)
Graduate Assistant, BYU, 1970

Business Experience:
Owner, Marysvale Merc. Co. Marysvale, Utah, 1939-1944
Owner, Voyle L. Munson Furn. & Appliance, Loa, Utah 1947-1967

Military Experience -- World War II -- 1944-46
Supply and Disbursing Officer, USS J. Franklin Bell (APA 16)

Community Service:
Member of Lion's Club and American Legion
Director, Sevier Valley L.D.S. Hospital
Chairman, Wayne County Fire Protection District Commissioner
Chairman, Capitol Reef National History Association
Utah State House of Representatives, 1965-66
Chairman, Wayne Scouting District

Church Service:
Fifteen years Wayne Stake LDS Presidency

Hobbies:
Reading, Writing, All Sports

CHAPTER III

INFORMATION RETRIEVAL COMPONENTS DEVELOPMENT AND OPERATION OF A REFERENCE CENTER

Procedures:
  Furnishing Documents to Clients
  Early Problems in Obtaining Resources

Resources

Record Keeping

Computer Related Problems 1971

The Project and The Havelock Model

1971-72 Highlights

Humanizing - The TAP Project and the SEA Guidelines

Microfiche Readers

NCEC Backup

Dissemination

Computerizing

APPENDIX:

ERIC Materials

Procedure Packet

Bulletin No. 22

Responsibilities of Reference Center Manager

INTRODUCTION

INFORMATION RETRIEVAL COMPONENTS
DEVELOPMENT AND OPERATION OF A REFERENCE CENTER

The Technical Assistance Project, although made up of two components, the Reference Center and the Field Agent component, works as one unified operation. The Reference Center acts as the service arm of the agents and their clients. The Project, at times, has had to activate as its only goal..."to serve the individual needs of the client." This was and is still the major goal of the Reference Center, in so far as possible. When decisions need to be made the Center considers first what the client needs as relayed by the agent. This criteria facilitates the personal importance of the educator client and hopefully will lead to a betterment of education for Utah's children. So the Reference Center cannot work without the agents and the agents cannot do a comprehensive job without the Reference Center. But for the purposes of clarity and presentation, the two components will be treated separately in the next two chapters.

It is also to be kept in mind that few decisions have ever been made by the Reference Center without the consultation by phone, by meeting or by letter with the agents. Although the decision making could have been relegated easily to the Center, the Center feels that cooperation and interaction with the agents is essential. So though it may read that the activities of the Center may be individual, they have not been.

The Case Studies hopefully will reveal the working relationship of the Reference Center and the unity of the two components.

Loya Metzger in her document Problems in Information Retrieval--Materials From the USOE Pilot State Dissemination Program ED 056 245, states that "In general, new issues have been encountered and dealt with on an *ad hoc* basis. Understandably enough, what would be the basic and most problematic issues to be confronted in setting up a central state educational information service could only be partially foreseen a year ago by any state, and not very clearly outlined. This, of course, is the purpose of pilot projects....so that such issues can be more carefully delineated in advance, and problems can be anticipated and perhaps avoided or alleviated for similar undertakings later on."

Other projects similar to the three Pilot projects have been initiated in the past year. With the above quotation in mind and realizing the truth in it, this report will be footnoted with new resources that have become available since 1970 to assist in the development of future centers.

DEVELOPMENT OF THE INFORMATION RETRIEVAL CENTER
Reference Center

To meet Objective A: "The project will establish a reference center within the State Education Agency and build the reciprocal relationships necessary for successful linkage of the resource and user problem solving strategies."

The Reference Center is presently located in the Utah State Board of Education office building and is well organized and expanding. The Reference Center Manager provides linkage for information retrieval to local school districts through the agents located in the four regional service centers. The project presently serves 25 of Utah's 40 school districts. The Reference Center also services the State Education Agency staff, Utah's Individualized Curriculum Development Project - U-SAIL, and other clients through special funding projects and selective dissemination. There was no reference center prior to the project and the state had only a limited professional materials collection. During the Summer of 1970 the Northern Colorado Educational Board of Cooperative Services contacted the Utah State Board of Education with the proposal to utilize their services for computerized searches of the ERIC information system for one year at no cost. (See Appendix , ERIC Materials)

In July 1970 the Reference Center Manager was hired and attended an initiating workshop at Boulder, Colorado, where she received her first introduction to the ERIC system and training in the Center's retrieval procedures. Procedures at that time called for Utah to use Boulder's request form and to write the request for information clearly and precisely with an emphasis on the use to which the information was to be put, as this assisted the coders in delineating the search. Arrangements were made to communicate by telephone each week for the purpose of clarifying requests. The request forms were then sent to Boulder, with a copy remaining in the Center. Time elapsed, in many cases a great deal of time elapsed. The original turn around time was to have been two weeks and sooner in emergency cases. The product returned from the Boulder center was a packet of abstracts answering an individualized request. These abstracts were from the RIE data base only. The packet, called a profile, was recorded, reviewed and forwarded to the agents, who in turn recorded and reviewed it to some extent and returned it to the client. One advantage of the Boulder system was its emphasis on evaluating each profile before it left the center. The first request was sent August 1970.

Furnishing Documents to Clients:

The project had been furnishing the requester with an ERIC abstract screening service which allowed them to look over the contents of an ERIC document before electing to read the document in full. It was found at this time that some clients relied on the abstract for the full information about an innovation and therefore he was not fully satisfied with an abstract that hit only the highlights, or that the solution to the question concerning him was not given on the first page of the packet. It was the policy of the project to offer alternatives to problem solving, not solutions. The abstracts, it was soon found, were not enough for the clients. The clients began asking for the full documents in the packets and assumed that the project would pay for these. One client desired a document that would have come to $19. Since many of the documents were not available from ERIC it was assumed that books, etc. would be supplied. It was also assumed that hardcopy of the documents might be provided. The Instructional Media Division owned a Reader Printer that had been loaned to another project. It took several months to get it returned and repaired. The project did not have access to a microfiche collection.

A good amount of time was being spent by the Reference Center in locating unavailable ERIC documents, ordering hardcopy documents from the national source that took a long time, much to the client's distress, and added to this, was the ever present problem of trying to find programs and materials not listed in the ERIC system.

On the matter of paying for documents, a deputy superintendent made the decision that the project would pay a $1.00 token fee toward a client's document. This would have been such an entanglement financially that it did not become policy.

In the meantime the Reference Center was studying alternatives to present to the administration on which route would be best to take in providing the ERIC collection to Utah educators. A paper was prepared by the Reference Center and presented to the administration by Dr. Lindsay, that indicated the eventual depth of the program, beginning with retrieval alternatives and giving the rationale for the necessity of purchasing the microfiche collection and alluding to future computerization possibilities. The center attempted to follow BOCES's suggestion that a microfiche collection be available to the project. Attempts were made to use the ERIC microfiche collections at the three Utah universities, but this was not possible.

A staff meeting was held December 2, 1970 to resolve some of these difficulties. In summary, the decisions coming from this meeting were as follows:

1. The Field Agents should have copies of RIE, CIJE and Pacesetters in their centers. PREP Kits, already in the State Agency were being copied and supplied to the agents. NCEC materials would be supplied as they became available. Even the first Early Childhood NCEC booklet was a thing of the future and this service was just being initiated.

2. As a measure to alleviate turn around time difficulties and give the client something tangible the Field Agents' secretaries were to do a quick manual search in the RIE when a request came in. Any pertinent abstracts would be xeroxed and returned to the client quickly, to be used as "advertisers" or as aids to writing more specific descriptorized requests.

3. The State Agency recommended that the Reference Center purchase the microfiche collection. It was decided to purchase the

collection back to 1968, as the indexes were available to to these and much of the ERIC material prior to this time was not seemingly of great value, as there had been little interest in older information. Thus the project would be able to supply the complete document from their own resources. The University of Utah could be used to supply an occasionally needed "older" document.

4. Field Agents were to have portable microfiche readers that could be loaned to requesters who wished to read the microfiche documents, in which they were interested.

5. A discussion took place about the possibility of installing Query*, then the only program for searching ERIC tapes. Research on this possibility was to continue. Even after the decisions had been made the project met with endless frustrations in implementing them. Even the printed indexes took an intermidable amount of time to obtain, and finally the Utah Congressmen were asked for help with the Superintendent of Documents. With their intervention, the indexes soon arrived.

The purchase of the microfiche collection for the State Department of Education, by state law, had to be let out for bid, even though it was available from only one source in the nation. The national contractor was changed at about this time and the original purchase order was returned and the whole bid-letting procedure had to be gone through a second time before a new order could be sent in.**

The microfiche collection was installed in the Reference Center in the summer of 1971.

Microfiche Readers:

The project provided four portable Bell & Howell microfiche readers to each of the agents. A DASA Portable was purchased for the Reference Center. During the time the microfiche readers have been in use there have been many problems with this brand of reader. Several have been replaced.

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*A great deal of effort was spent writing Query users to get a reading on the effectiveness of Query. Several months' work went into this research.

**It was terrifically difficult to locate a person in a good many of these companies who could be of any help on any of these problems. After two years work, the Center feels confident in that there are contacts in the following areas that are helpful and trustworthy.

ERIC
EDRS
PREP & NCEC Materials
CCM
LEASCO

OTHER RESOURCES:

The searches from Boulder were taking a considerable amount of time and the "fiche" collection had not arrived, so the Reference Center began gathering other resources with which to satisfy the clients. A collection of "in state" programs for visitations was begun. Consultant lists from the three universities and the community were compiled. State specialists' names and capabilities were extended to the agents as resources. A good many outside contacts were made, at this time, which tended to make the Reference Center the "linking" agent, it was meant to be. The State Library, providing Interlibrary loan facilities, the University and Public Library Reference Departments, Sierra Club, the Utah Historical Society, and many others were added to the list of resources. Journal collections were initiated. By 1971 the list appended had been developed.

Many of these were in direct answer to client's request, and therefore these resources became quite relevant ones to others, as there was some repitition developing in requests. Much writing in and out of state and phoning was required to locate resources. R & D Lab brochures and materials were procured for the files and personal contacts found for these. At this time the lists of Centers and Labs were incomplete or not up to date, and this material had to be checked for accuracy. Many out of state information agencies were tapped and their brochures added to the files. This took a good deal of time and effort.*

RECORD KEEPING AND FILING:

The TAP project was initially using Boulder's request form. These forms were all prenumbered and different batches given to different Field Agents. The Field Agents did not necessarily use their forms in the numbered order and forms were being returned simultaneously by all Agents, each of whom had numbers in a different range. Thus, there was no numerical order of the identification numbers received by the Reference Center. In addition, no number at all was assigned to a request that was not to be forwarded to the Regional Center for a computerized search.

As the project devised many new local resources, a form was needed to record what the Reference Center and the Agents, who were digging up their own resources, were doing. A goodly amount of pressure was being applied by the evaluation team for records and information about what the project was doing. At this time there were few reference centers extant, but the forms of these were written for and studied.* By the end of summer 1971 a request for information form had been developed that met the needs of the project. Uniform Log sheets had been developed and were in use by the agents' secretaries for recording requests. The Reference Center advocates as few forms as possible and these should be limited to one page. However, forms and instructions are necessary and some that have been developed for the project include a User Information Sheet, a colorful cover for the packets, a brochure, microfiche evaluation form, search sheets, instructional sheets for secretaries, an evaluation form, and the monthly reporting instrument. A procedural booklet has also been prepared. (See Appendix , Forms)

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*Information Resources by Judy Wanger has been published since this time and is an aid in locating these resources. CEDAR, 775 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80203, has become an excellent resource.

Computer Related Problems:

Derogatory comments were often heard, in those days, on the quality of ERIC materials, but the Agents stated many times that their clients felt there was value in the ERIC materials that they received, because they had never had access to a service such as this before.

In the early days of the project there was a great need for fast turn around time because there was nothing but Boulder abstracts to offer. Local resources were "pushed" in lieu of ERIC materials. As Boulder became more swamped turn around time became worse and worse. Finally in January 1971 Boulder closed down and devised a new system of "prepackaged" materials derived from the ERIC data base. New products were: PET (Packet of Educational Topics), CAT (Catalog of Computerized Searches) and CAP (Current Awareness Profiles). This move was intended to be a varied level type of program with people asking for CATs or PETs to get an overview of a subject. Then a Sid, if necessary, and a CAP to keep them alerted in that area. Few times did this concept really work. But the packaged materials were well received and could be obtained in a brief time. The Sids still took 2-3 weeks time, but this fact was now acknowledged by the requester when he ordered a Sid. A full discussion of packaged products may be found in several microfiche documents put out by the evaluation team and will be alluded to as the report progresses.

Being new and very busy keeping system running day to day, the time to work on future computerization was negligible, however, with the insistance of the evaluators and others the project gathered information on Query. Basic planning for the computerized system in Utah was begun March 16, 1971 when authorization was given Dr. Lindsay and the project to spent $1,000 "to try out a new Query system." (See Appendix Bulletin No. 22).

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*The Information Center beginning today can obtain a large book of requests and other forms gathered from the many projects doing this type of work to review from RISE. Thanks to Mr. Brickley's foresight, this document can be an invaluable service to the newcomer, especially if kept updated with the newly developed forms of the centers as they progress. A great deal of help was obtained from the training team throughout, especially in the beginning of this portion of the project. Mr. Bill Hoff was of great benefit in helping us to forsee difficulties. Also the prodding of the evaluation team for various reports caused consternation but was very valuable. METZGER ED 056 245

The project was fully aware of the problems of Query when it was installed and the original intent was to modify this system.* If it looked like the project would be able to support (by requests) an elaborate computerized information retrieval system, the modifications were to procede. The RIE and CIJE tapes were purchased and early summer of 1971 the Query system was installed in a very sloppy fashion. The system was originally placed in the computer in the Salt Lake City Board of Education. All state materials were subsequently placed in the Granite (another large district) computer center, several computers tested, the IBM 370/145 finally selected and installed became the official State Agency computer. Nothing was accomplished on the "Query" modification for a year and a half, due to the computer difficulties and lack of familiarization with Query.

TAP PROJECT AND THE HAVELOCK MODEL - 1971

The project has seriously attempted to implement Stage I, Building the Relationship Phase, of the Havelock Model and also Stage III, Acquiring Relevant Resources.

The agents and project personnel found it easy to work in a helpful or facilitating way in answering specific informational requests under the heading of Building the Relationship. Luckily when the agents were selected their humanistic qualities were part of the criteria of selection. Moving into the second stage, Diagnosing the Problem, has been much more difficult.

In the early stages of the project it was felt that the agents should do a good deal of diagnosing. It was found that educators seem to feel comfortable at the "solution" level, but ill at ease when asked to identify real problems. The tendancy is to want to treat "systems" rather than "causes." The personalities of the Field Agents and the rejection of some suggested problem diagnosing strategies resulted in more emphasis being placed on the Building the Relationship aspect of the model. It tookconsiderable time to come to concensus on this point within the project. This, however, does not denigrate the idea of diagnosis in a project of this type. It is an extremely viable concept, but must be treated with great care as far as the individual client is concerned, and a range of strategies devised that are more humanistically oriented.

Stage II, Diagnosing the Problem, cannot be accomplished until Stage I has been completed. A full discussion of this aspect may be read in Sam Sieber's evaluation of the project. MF ED 056 245.

Depending on the personalities of agent and client, Stage I may take a short time or a long time. The client can only be helped to do his own diagnosis and implementation and eventually his own renewal. We do not yet see change on a grand scale, but many signs of change on an individual basis are evident.

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*This subject will be updated chronologically later in the report.

Slowly the project has moved on Stage IV, Choosing a Solution, and Stage V, Gaining Acceptance.

If there is any one thing the project has learned, it is that there is no one way to proceed. Many people have asked what specific procedures the agents follow. Each one is entirely different. The physical procedures of request getting, transmittal and record keeping are the same; but the personal relationship of agent and client, his aims for each, the information he plans to obtain from the Reference Center. . . these are the private domain of each agent, and no set policy can be arrived at to catalog these procedures either on the part of the agents or the Reference Center as each contact is an individual case.

The policy of this project is represented in the following rationale: There will be a perceptable shift

	From	Toward
1.	providing a single best idea suggestions and helps.	providing a variety of pertinent information from which alternative solution strategies may be designed.
2.	utilizing one or two sources of information in solving a problem.	utilizing many sources of information.
3.	persuading the user to work on state priorities.	helping the user identify his own needs in light of state priorities.
4.	SEA specialists working individually with teachers, schools, and school districts on succinct programs.	SEA specialists working in coordinated teams with schools, cluster of schools, and clusters of districts as systems.
5.	installation of innovation before problems have been identified in local districts.	A systematic process of problem solving that culminates in installation of innovative solutions.
6.	the use of "handy" information that happens to be available.	systematic search and retrieval from the universe of information sources.

In terms of the project's original rationale, success has been most noticeable in Numbers 1, 2, and 6. Number 3 has been initiated. The least success has been realized in Numbers 4 and 5.

The TAP Coordinator has provided the linkage between LEA's and agency personnel. Agency personnel have committed 10% of their time to Technical Assistance activities.

The use of the team approach has seen some success but not as much as the project would have hoped. The future should see more use of teams or at least more implementation from individual specialists. Some of the difficulties have been beyond the project's control, such as specialists prior time commitments, scheduling difficulties and the fact that many specialists make recommendations but do not have the time to follow up to insure implementation of suggested activities.

By the beginning of the school year, 1971, the project was ready to move into action. Many of the facets of the program had fallen into place and a workabel system was available that could respond immediately to a client's needs. If necessary, the system could correct a misworded request, locate further needed materials and provide technical assistance.

Logs and recording forms were adequate and the staff had been instructed in procedures and job descriptions defined, advertising materials produced, resources were being continually defined and located, search techniques were improving and the day to day processing of information requests were more efficiently handled.

As the Reference Center moved into its second school year, the emphasis of the project was on providing the service and putting information into practice as we had set out to do a year before by answering accurately the requests and getting into the business of supplying what the client needed from a wide realm of resources. A definite attempt was made to collect documentation for the work the agents were doing. The Case Studies in the appendix are a few evidences of the work done in 1971-72 to enhance the project's capabilities.

1972 Highlights:

Several important things occurred in 1972. An additional capability was added to the project with the initiation of microfiche duplicating. The Utah State Archives responded to requests from the Reference Center to purchase a microfiche duplicating machine. Since this time, January 1972, the project has been able to produce the microfiche for the requesters. The client's request for duplication comes to the Reference Center through the agent, the original fiche is sent to the Archives, located in the State Capitol, through the agency mail. Within two days the duplicated fiche and original are returned to the Reference Center and the client's copy sent to the agent to distribute. This service has been free of charge.

A transparency presentation of ERIC and the TAP program has been prepared and distributed to each agent to use in selling the program.

During this year, the coordination with the Far West Lab began and the TAP agents began dissemination of the Minocourses provided by the Lab. This has been one of the project's most successful ventures. The relationship between the TAP project and the Far West Lab is becoming a mutually beneficial one.

Humanizing: The TAP Project and the SEA Guidelines.

Earlier in the report Dr. Talbot's philosophy was mentioned. In a later speech some specific quotations regarding "humanizing" were: "The first aspect of humanizing is profound respect for the student or our clients."

The project has attempted to show respect for the client by facilitating a position self concept by developing a client relationship that is free from threat. A person who is free from threat tends to be more "open to experience." The aim has been in the personal relationship of the agent to client to foster "openness to experience" and then to provide more input data for decision making to the individual by way of a variety of information and resources to match his needs.

Dr. Talbot stated that we "should develop a relationship among teachers, administrators and students which creates an atmosphere in which the student feels wanted and important." Hopefully the case studies of the past two years, and more directly those of the future will indicate the influence of the project resources toward this goal.

"We need to move from the rigidity which force clients and students into one mold by offering alternatives in information, not just one.... they are obliged to look at several aspects of a problem situation." The project hopes to provide research information that illustrates both sides of a proposition and allows the educator the distinction of drawing his own conclusions, to provide programs from various labs etc., that are based on a variety of research approaches and to be able to put into the hands of teachers and administrators the newest information to provide a fresh viewpoint...allowing a vision of what might be available and the personal contact to help further. The project has also been an expeditor of the use of new technology in the emphasis on microfiche and microfiche readers and the use of computer technology.

Microfiche Readers:

With the increased circulation and duplication of the microfiche has come the need for additional microfiche readers. Discontent with the mascot model and the need for easy portability has led one agent to purchase a Dasa reader for her Regional Center. The project is reviewing several new readers and will be purchasing others soon.

Needs:

Realizing that the project was geared to individual interests, it becomes necessary to, at times, survey these needs. At a national conference the Sensing Network - Information Needs Study was announced. The Reference Center has been about to embark on a needs study of its own, but as the Stanford survey became a reality, the TAP project attempted to use the survey in Utah. The needs assessment came at a bad time for the project and the response was not adequate. It was, however, a beginning and gave some familiarization with the procedures of a thorough needs study.*

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*The survey materials have arrived at the Center. The Stanford Project will have to charge for its services next year. An effective information needs study is basic to the operation of an Information Retrieval Center.

NCEC - Backup:

Several national studies encouraged by NCEC have given information senders a great deal of much needed information. The ERIC products survey conducted by Bernard M. Fry gave a great many insights into the use of ERIC system itself have been invaluable. A study of R & D Labs and Centers is also being conducted. Systems Development Company also conducted a study.* Also the final report from the Training Project is out and will be of value to others training personnel.

Several other new sources of valuable information to centers are the ERIC Users Notes and the Dissemination Newsletter from South Carolina. Leasco has recently been commissioned to handle ERIC Tape Users Conferences and put out a newsletter that is being eagerly awaited. RISE also circulates a newsy bulletin.

Dissemination:

Soon the real dissemination function of the project began to come into focus, as some formalized structures were set up to collect, catalog and circulate the new things that appeared on the horizon. Far West Minicourses is one example. The Agents met, formally decided which course each was to use and set up a formalized schedule for their use. No. 10 will soon be field tested in the Southwest Media Center.

The Educational Products Display in September was the first experience with large scale projects and their procedures. We learned from that experience that far more formalization is necessary before attempting to disseminate on a large scale. See Monthly Reports and October's Quarterly Report.

The Educational Products Minikits, produced for NCEC, have been distributed to the Agents and these will have more immediate effect on the individual districts.

Some materials have been ordered from the Laboratories as part of this area of dissemination. Recently a Deputy Superintendent wanted to see the description of a lab program in Social Studies. The Reference Center checked with CeDaR and located the program and wrote for materials. Eventually the curriculum materials arrived and the several specialists involved looked them over to see how they could implement our present new Social Studies guide. The returned responses were sent to the Deputy Superintendent by the Reference Center and the Social Studies Specialist is now attempting to arrange for a field test of these materials.

Many items are being asked for by this Deputy Superintendent who, when he receives them from the Reference Center moves on some and discards others. Under the area of dissemination also comes ERIC acquisitions. The Reference Center is developing a list of innovative projects derived from its two year operation in gathering local resources. As this is formalized and evaluated more emphasis will be placed on putting materials from these projects into ERIC. At the present time, one of the demands voiced by the state has to get the materials from a heavily federally and state funded project before the Utah educators. U-SAIL (Utah-Systems Approach to Individualized Learning) materials will be gathered soon, listed and sent to ERIC, making them available to all. They will be in microfiche and hard copy. Also due to the Reference Center's responsibilities regarding agency publications many new local guides are being added to ERIC.

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*Much to the project's dismay a great proliferation of surveys came from Systems Development Corporation into the SEA. They were thought to be from our project and since the Columbia Evaluation Team's surveys were also blue SEA personnel were very unpleasant and even uncooperative in answering Columbia's forms.

In initiating the dissemination segment of the project beginnings have been made to make the Regional Service Centers resource centers in their own right. Not only are they equipped with microfiche readers, ERIC indexes and NCEC materials, but the agents are receiving materials and newsletters from clearinghouses, labs and centers. The clearinghouse publications have been found to be timely and beneficial to our clients. Many times when ERIC itself has not provided anything in the way of adequate information the clearinghouses have been asked for help. The Math, Social Studies, Tests and Counseling have been very helpful.

During the past year one of the most rewarding projects of the Reference Center has been to solicit information requests from projects seeking SEA funding. Letters were written to project directors explaining the Reference Center services and asking them to check and return the letter if they desired ERIC services. A good many of these did. These people need research backup and know how to incorporate it into working plans. With them individualized ERIC searches are essential. Many of these have become good clients. Projects contacted were those under Title I, Title III, Experimental Schools, Teacher Leadership, Model Media and Career Education. A great deal of interest in microfiche readers came from Utah's largest district due to its discovery of the ERIC service.

Another area recently added to the Reference Center has been the supervision of the Careet Education library of materials. Now both local and ERIC information is disseminated.

More recently the agency itself has spent a great deal of time discussing dissemination. Dr. Lindsay headed a task force on dissemination, with members from the Publications Division, Public Information and the Reference Center Manager.

Since the Coordinator is also the Title III Coordinator it is necessary to develop some formalized procedures for Title III and Title I and all other innovative projects. Studies of the best means of accomplishing this are being carried out. The agency has shown increased interest in innovations by having a position paper produced on the subject by the Research Division.

Computerizing:

Beginning in June 1971-72 the Northern Colorado Board of Cooperative Services (BOCES) was paid on contract to continue its services to the State of Utah at a cost of approximately $9,000 for the year. Most of the year found the service from Boulder moving smoothly. Gradually changes have been made, however, which when added to the cost feasibility factor have made it necessary for the Reference Center to renew its efforts toward its own computerized system. With the Boulder contract expiring in June 1972 the new contract figures were far higher than the previous year. Previously searches had been unlimited. With the new "bank account" type of system, care had to be taken to select the type of searches that would give the most for the money, and also the number of searches had to be carefully surveyed. This was not compatible with the project goal of eventually going statewide with the ERIC retrieval services.

Other reasons for looking at local computerized searching are: Boulder did go to packaging to save time, but this type of packaged research material is good for a specific purpose and clientele. Individualized searches, which are the heart of the ERIC system, still take 2-3 weeks. Immediate turn around time has not been a great need except in specialized cases, but better turn around time is necessary for effective implementation of research materials.

Utah becomes the victim of changes made by Boulder in its system as there is no decision making input from the states with Boulder, only in the line of question negotiation. For example, mailing changes and changes in document request forms have caused frustration in the Utah retrieval unit.

Relevance of materials is a most important. A more efficient system for obtaining relevant searches can be developed when the retrieval process is closer to the client. TAP conclusions on computerization seem to be borne out by the Columbia Evaluation Report by Loya Metzger, "A state should plan initially to provide its own computerized search capacity. Reliance on a regional installation means that the information service will have little change of influencing such matters as turn around time, relevance or adequacy of the computerized search. Thus, resorting to a distant computer service should be viewed at best as a stopgap measure, one that will ultimately prove unsatisfactory."

In May 1972 it was discovered that the Data Processing Division did not have the Query source decks with which to experiment with the Query system. Through the help of ERIC personnel in Washington the source decks were sent to Utah. The project then began to look into what it had installed and what the next steps might be.

Inter-agency cooperation: The Reference Center Manager has been hired in the Instructional Media Division. At the present time, the Reference Center resides in that Division. During the past two years the Reference Center Manager's responsibilities in this division have increased. At the present time she supervises the operation of the Media Center. Several fine staff members assist with this. Another task has been the production of a printout of Agency subscription periodicals. This is the responsibility of the Manager. Media personnel and Auxillary Services personnel work with this as well as performing a screening service for new publications for a deputy superintendent. An Agency produced publications policy was developed by the Manager, which delegates the collection and distribution of Agency publications for purchase and the development of a new Agency price list for publications.

These responsibilities enhance the project's effectiveness by adding to its visibility, allowing for contacts with all specialists and providing specific materials to implement requests. The printout may be used in the future to produce some type of packets.

The Instructional Media Division Plan lists these responsibilities of the Reference Center Manager. (See Appendix - Responsibilities)

The current objectives and tasks related specificially to the Reference Center component are as follows:

Objective: To develop and maintain a "one stop" reference center that links national and educational local information sources to the educator audience and responds to the needs of this audience for information and technical assistance that offer many alternatives for the betterment of the educational programs for Utah's school children.

Tasks:

1. To quickly and fully as possible satisfy information requests from State Agency and the local extension agents and their clients.

2. To aid in providing any needed follow up, back up technical assistance, or consultant help.

3. Provide for two way communication between the information bases and the client.

4. To provide feedback to the national sources of information for continual improvement and closer attention to educator's real needs.

5. Support educational decision making and program development based on the use of current relevant information.

6. To feed into national resources, locally developed materials, making them visible nationally as well as locally.

7. To continually gather and screen local programs and resources to be ever more effective and responsive to educator's needs.

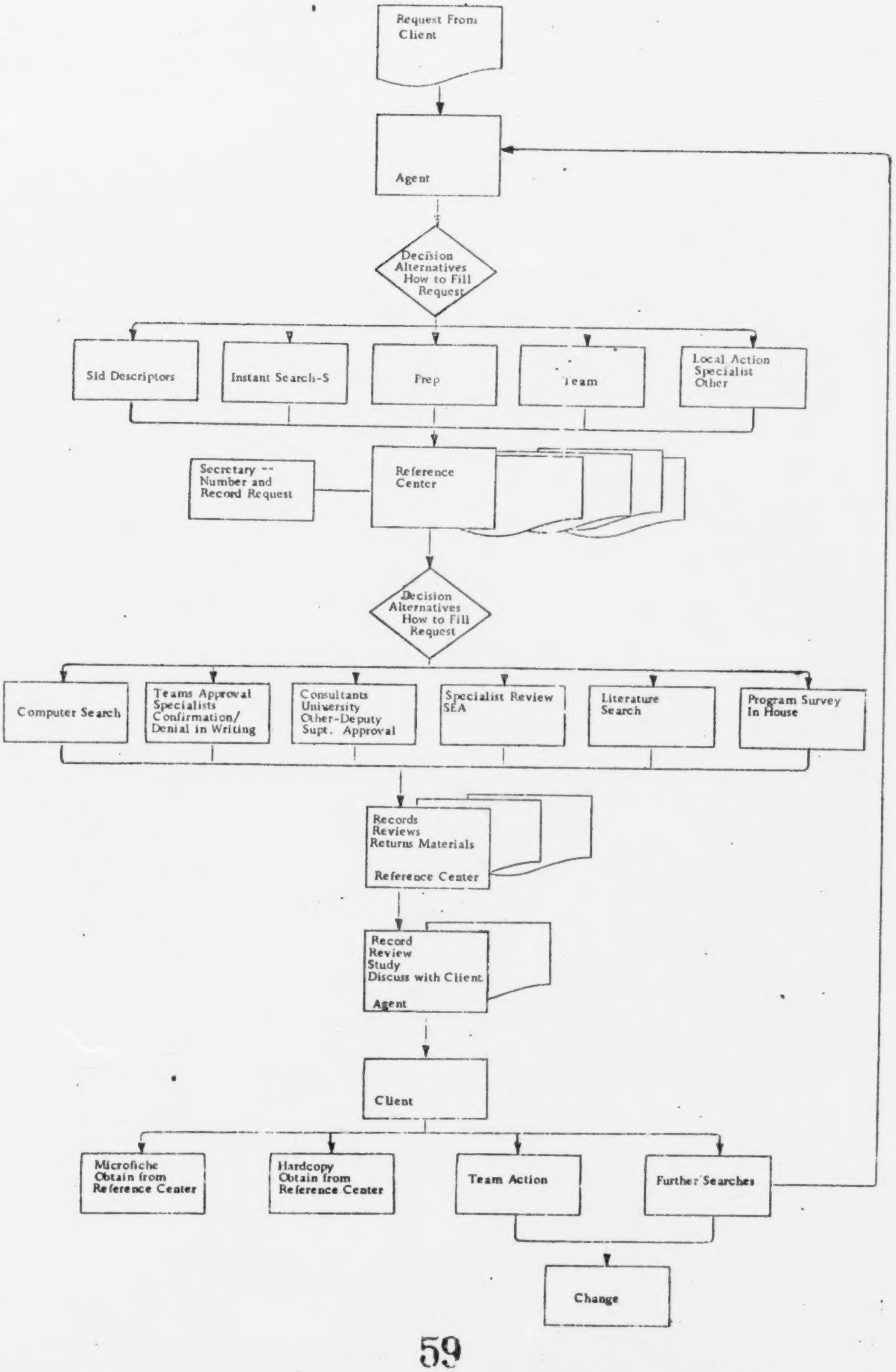
8. To assist the regional centers to become resource centers for the dissemination of evaluated products.

9. To build and provide a sturdy base for the extension agent program.

10. To continually assess the information retrieval process to provide the most relevant information, "to understand more thoroughly the necessity for the personal 'interface' and the importance of the communication process."

A flow chart that defines the project is attached to this page.

For the Procedures, Forms, Job Descriptions and Operational Materials of the Reference Center see Appendix


Request From Client
Agent
Decision Alternatives How to Fill Request
Std Descriptors
Instant Search-S
Prep
Team
Local Action Specialist Other
Secretary -- Number and Record Request
Reference Center
Decision Alternatives How to Fill Request
Computer Search
Teams Approval Specialists Confirmation/ Denial in Writing
Consultants University Other-Deputy Supt. Approval
Specialist Review SEA
Literature Search
Program Survey In House
Records Reviews Returns Materials
Reference Center
Record Review Study Discuss with Client
Agent
Client
Microfiche Obtain from Reference Center
Hardcopy Obtain from Reference Center
Team Action
Further Searches
Change

APPENDIX

Announcing

THREE NEW ERIC INFORMATION PRODUCTS ...NOW AVAILABLE TO YOU

✱ 1. PET - Packet of Educational Topics - is a combination of ERIC abstracts and xeroxed articles from current journals. PET provides survey-type background information pertaining to such "hot" topics as Accountability, Behavioral Objectives, Environmental Education and Individualized Instruction.

Turn around time - 1 week

✱ 2. CAT - Catalog of Computerized Searches - is a packet or "profile" of ERIC abstracts for the information seeker in a specific area such as Art Education, Early Childhood Education or Elementary School Counseling.

Turn around time - 1 week

✱ 3. CAP - Current Awareness Profiles - is a quarterly review of the most recent ERIC reports in abstract form. You may subscribe to this service and the updated profiles will come to you automatically. There are 30 titles available in the CAP index. Several are Educational Facilities, Educational Finance and Language Arts.

Turn around time - 1 week

In case you have forgotten ERIC means educational research information from the EDUCATIONAL RESOURCES INFORMATION CENTER.

The SID - Search in Depth - is still available for the user whose question cannot be satisfied through the three new products.

Turn around time - 2-3 weeks

These three new products may be ordered from the Technical Assistance Reference Center. They are free!

ERIC - 1970-1972

Anyone familiar with American education realizes that it is undergoing a knowledge explosion similar to that occuring in the sciences. The contents of the explosion include curriculum materials, instructional media, research reports, program descriptions, training materials, and numerous other types of information.

Until a few short years ago (the mid sixties) this explosion in education threatened to get out-of-hand. However, ERIC made its appearance in time to forestall the threatened inundation.

Briefly, ERIC is a system of twenty clearinghouses, each responsible for searching out, reviewing, assigning terms descriptive of the content and abstracting pertinent fugitive literature in an important domain of education. Documents and their abstracts selected for inclusion in ERIC are forwarded to Central ERIC, a branch of the National Center for Educational Communications of the United States Office of Education. Central ERIC in turn submits the materials from all clearinghouses to a contractor who microfilms documents which are not copyrighted. Each document appears on one or more microfiche; a 4 by 6 inch sheet of microfilm which can hold up to 72 pages. The contractor also prepares a monthly publication, Research in Education, containing the abstract and bibliographic information for each document. This publication serves as an index to the ERIC collection using the descriptor terms assigned to the documents by the clearinghouses as the index terms. The clearinghouses also review the educatioanl articles of over 550 journals.

The articles are assigned descriptors so that they can be indexed similar to the documents in RIE and the bibliographic information appears in a monthly publication titled Current Index to Journals in Education; however, microfiche copies of the articles are not available.

While any organization can subscribe to the indices and obtain copies of the ERIC microfiche, the ERIC system is not without its special problems. Most obviously, thousands of educators must be informed of this system and its potential uses. Educators must then be provided ready access to ERIC materials, microfiche readers, and microfiche printers in order to maximize the utilization of the source documents on microfiche. Most importantly, educators must be stimulated and motivated to develop professionalism similar to that of the scientist in order that they might continually seek the best education program possible. This includes the effort to remain current within a specialty, something too few educators can yet boast.

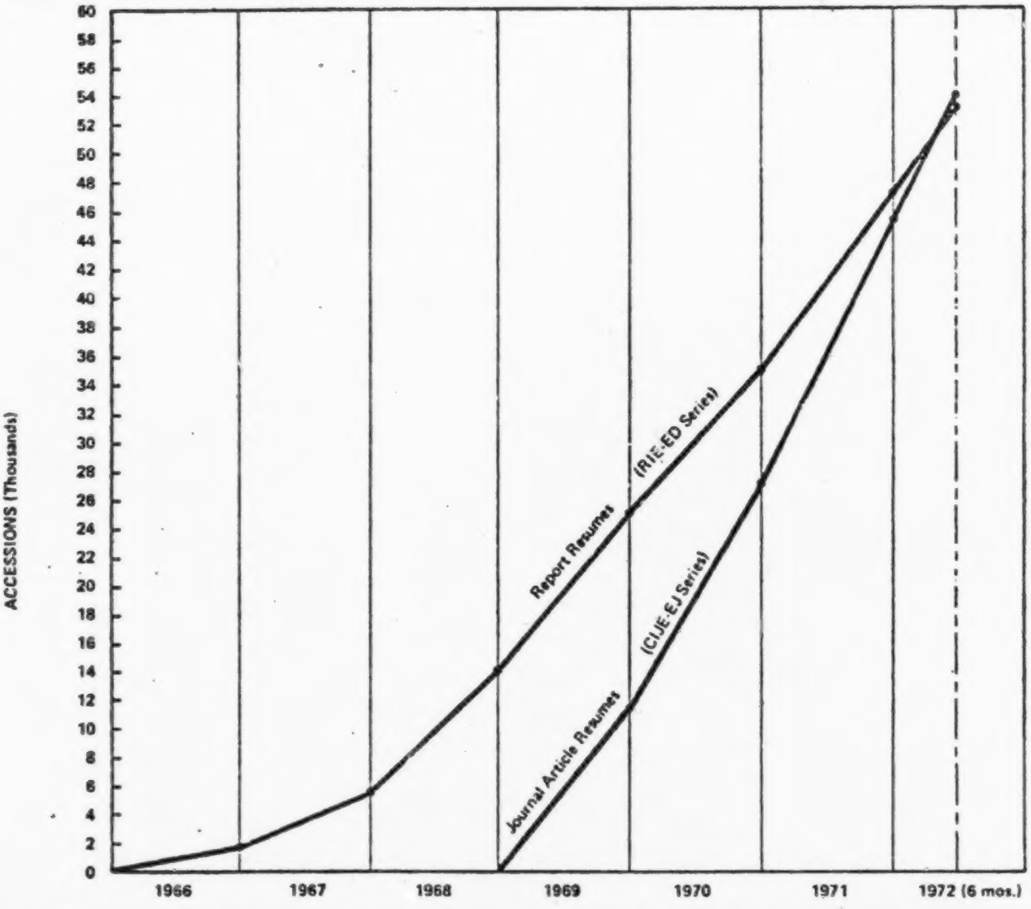
As of July 1, 1972, ERIC had indexed 54,390 documents and CIJE had indexed 45,271 articles and the respective yearly rates of expansion for these two collections were 12,329 and 17,671. Seventy-eight organizations now purchase and use the ERIC data base on magnetic tape on a continuing basis:

Institutions of Higher Education	33	(42%)
State and Local Educational Agencies	14	(18%)
Commercial	13	(17%)
ERIC Clearinghouse	8	(10%)
Foreign	8	(10%)
Others	2	(03%) [1]
	78	100%

---

[1] The following chart indicates the growth of ERIC since 1966

Any individual desiring to conduct a search of the ERIC and CIJE holdings for information pertinent to a particular topic has a major task even with the monthly issues of RIE and CIJE, the yearly summary indices, the thesaurus of descriptor terms and assuming the person has access to these indices. As a means of lessening the burden on the individual, the computer is now being called upon to perform the clerical chores of searching the ERIC and CIJE collections.



Year		1966	1967	1968	1969	1970	1971	1972 (6 mos.)
Reports	Accessions Added:	1834	3469	8803	10,453	10,456	12,330	5838
	Cumulative Total:		5303	14,106	24,559	35,015	47,345	53,181
Articles	Accessions Added:				11,707	15,892	17,672	8656
	Cumulative Total:				11,707	27,599	45,271	53,927

I. ERIC DATA BASE – FILE GROWTH

Taken from: An Alternative to Query by Ed Krohmer, et al.; Resource Information Center, Grand Forks, North Dakota; pp 1 & 2

INDEX

1. Resources
2. Procedures for ERIC Search
3. Handling Requests - Manual Search
4. Technical Assistance Project Check List
5. Flow Chart
6. Procedures for Securing Institutional Specialists
7. Procedures for Handling Loan Equipment
8. Procedures for Securing State Department Specialists
9. Procedures for Communication and Coordination of T. A. P.
10. Procedures for Assessing Charges and Collecting
11. Procedures for PREP Packets
12. Job Description

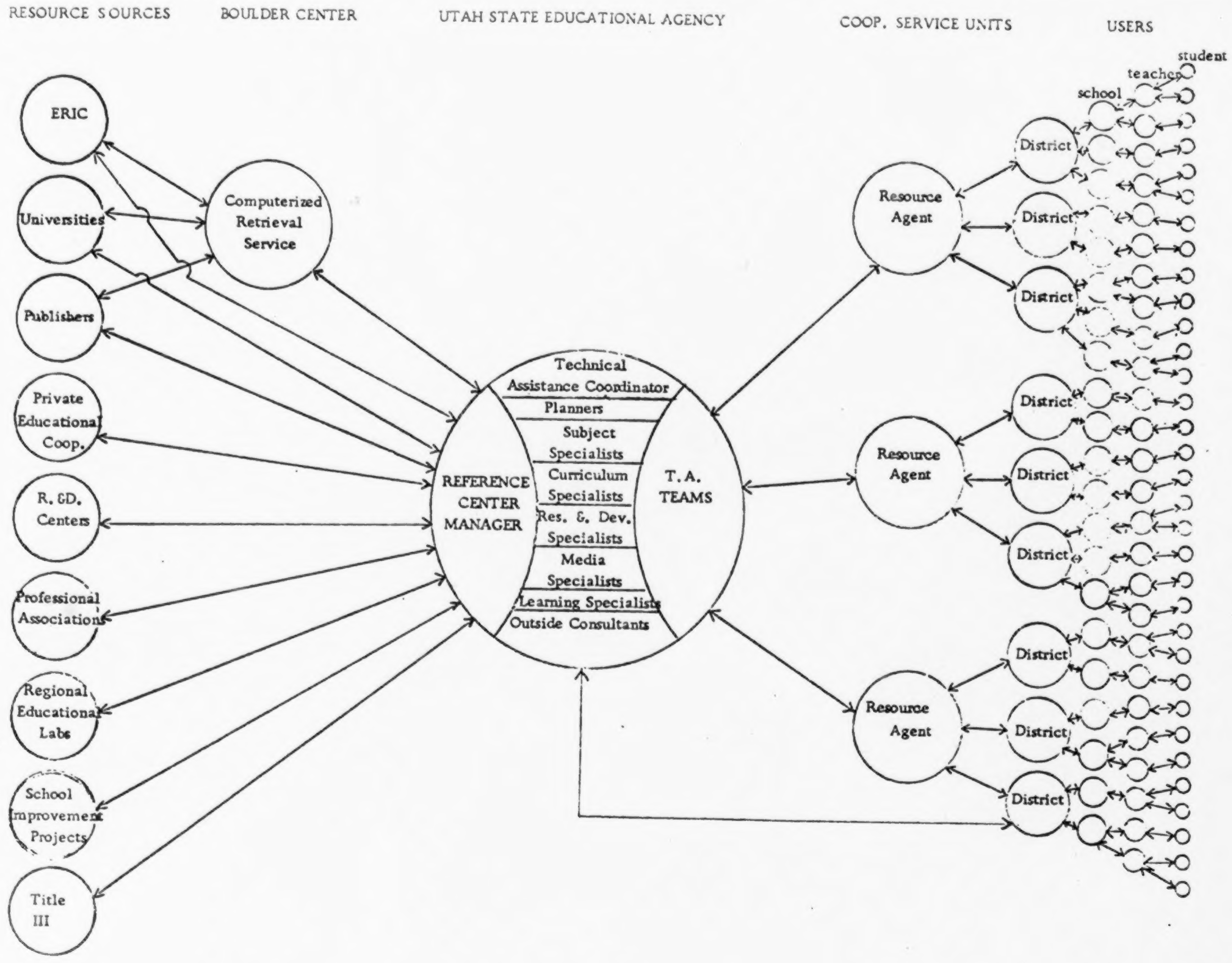
RESOURCES

General

Have contract with Boulder Information Retrieval Center.
Have contacts and correspondence with ERIC Central.
ERIC Clearinghouses (all)
R & D Centers (all)
Utah State Library
University of Utah Library
University of Utah Consultant (lists)
B. Y. U. Library
B. Y. U. Consultants (list)
Weber State Library
Weber State Consultants (list)
Utah State Library
Utah State Consultants (list)
Reading Center - Salt Lake
Bureau of Economic Research - University of Utah
Bureau of Educational Research - University of Utah
Local Title III Projects
Local Innovative program survey
S. E. A.
Utah State Historical Society
Utah State Archives
Local Business and Industrial contacts
    Manufacturers and Industrial Commission
PREP
NCEC
Fugitive file collection
All S.E.A. handouts

Subscribe to:
R.I.E.
C.I.J.E.
Administrator's Notebook
American Education
Education Index
Education Recaps
Educational Reseacher
Education U.S.A.
Memo to the Faculty
Monthly Catalog
National Council on Measurement in Education
Research Bulletin - N.E.A.
Review of Educational Research/AERA
Theory Into Practice
IDEA Reporter

ERIC MICROFICHE COLLECTION FOR 1968, 1969, 1970 and 1971.


RESOURCE SOURCES
BOULDER CENTER
UTAH STATE EDUCATIONAL AGENCY
COOP. SERVICE UNITS
USERS
ERIC
Universities
Publishers
Private Educational Coop.
R. &D. Centers
Professional Associations
Regional Educational Labs
School Improvement Projects
Title III
Computerized Retrieval Service
REFERENCE CENTER MANAGER
Technical Assistance Coordinator
Planners
Subject Specialists
Curriculum Specialists
Res. &. Dev. Specialists
Media Specialists
Learning Specialists
Outside Consultants
T. A. TEAMS
Resource Agent
Resource Agent
Resource Agent
District
District
District
District
District
District
District
District
District
school
teacher
student

PROCEDURES FOR ERIC SEARCH & HANDLING OTHER INQUIRIES

1. See Technical Assistance Project check list and flow chart for Agents procedures. Agents take requests: based on client need, they choose any of four Boulder searches or local retrieval service.

2. Three copies of all (ERIC and local) requests come to Technical Assistance Reference Center.

3. Secretary logs in and records Center number and any information left out, such as dates or blanks unfilled.

4. Mails Boulder copy to Boulder the same day.

5. Two copies to Reference Center Manager for review for need of further search (analyze and review).
    If so - put in local search file to be searched.
    If not - filed and evaluator's copy filed.
    If search done - information sent recorded on two copies and letter or listing sheet sent to agent for recording with material and state of request.

6. Boulder returns request form copy - the Reference Center can record and log it in more easily, it is then sent to the agent so he can review request and agent's secretary can log in.

See Flow Chart.

PROCEDURES FOR ALL OTHER INQUIRIES
SAME AS ABOVE

1. Request form filled on each local request, labeled as such, numbered, logged in and same review procedures followed.

2. All requests counted on monthly reports

RETURNED BOULDER MATERIALS REPACKAGED:

3. Note attached to return evaluation, self-addressed envelope, cover and user's guide added to profile.

4. Logged in.

5. Reference Center Manager reviews profiles and evaluates to see if more information is necessary.

See Flow Chart.

HANDLING REQUESTS (INQUIRIES)

SPECIFIC PROCEDURE

MANUAL SEARCH

REVIEW REQUESTS

TERMS
Boulder Indexes

Thesaurus Terms

Latest three RIE'S

Latest three CIJE'S

Education Index for headings

Encyclopedia of Educational Research

PROGRAMS
ERIC Clearinghouse newsletters

NEA

CEDAR

LOCAL PROGRAMS

CONSULTANTS

REQUEST FOR TECHNICAL ASSISTANCE INFORMATION SERVICES

USER REQUEST FORM

Center No. ____________________ R. C. No. ____________________

First Request Yes ______ No ______

Name of Requester ____________________ Title ____________________

School/Office/District ____________________ Phone ____________________

Address ____________________ City ____________ Zip ________

DATES TO: RETURN TO:

Original	RC	Eric-Other	Due	RC	Agent	User	Follow-up

Did the request come directly from the requester? Yes ________ No ________ Was there a go between?

Name and Position ____________________

Submitted to Ref. Center by: Form ________ Telephone ________ In Person ________ Letter ________

1. Please state in your own words the information you seek. You may want to word your area of concern in a question form, define your understanding of key concepts or underline key words. Educational Area: ____________________

Age or Grade ____________ . Be as specific as possible.* ____________________

2. Main use for information (e. g., curriculum revision, research proposal, etc.) ____________________

3. Please indicate the type of information desired. (Please check or fill in.)

ERIC SEARCHES: See Indexes.

CATALOG Search No. ____________ CATALOG Issue No. ____________

CATALOG Title ____________________

PET (Packets of Education Topics) Topic Category ____________________

Packet Title(s) ____________________

CAP (Current Awareness Profile) No. ____________ CAP Title ____________________

SID (Indiv. Search in Depth) ________ Descriptors: ____________________

OTHER SERVICES:

Technical Assistance ____________ PREP # ____________ NCEC ____________

Bibliographies: Type ____________ Program Surveys: Subject & Level ____________

Microfiche ____________ Other ____________

MATERIALS SUPPLIED: ____________ MF ____________ HC ____________

Any Action taken by Agent or Reference Center. Explain: ____________________

EVALUATION COMMENT: ____________________

*Please use a separate form for each request.

REFERENCE CENTER COPY

RC Number

Subjec.

.le Name (Requester)

TECHNICAL ASSISTANCE PROJECT CHECK LIST

The TAP secretaries are responsible to the Resource Agent, work part time for the Technical Assistance Project, and are extremely important to the success of the project.

The secretary coordinates with the Regional Center specialists and staff, the TAP Reference Center staff, and the requesters in the area.

The basic function of the secretary is to assist the Resource Agent in his attempts to close the gap between research and practice in education.

SPECIFIC RESPONSIBILITIES:

TAP USER REQUEST FORM

Take the request from the agent and type.

If a SID, the descriptors will be indicated by the agent.

Fill out the TAP user request form in quadruplicate. Number and fill in any work done at the center on the request, such as PREP, or an abstract given.

Do a preliminary search of RIE, CIJE, or other ERIC materials. (Use Search Sheet for instructions on how to do this.) Send Search Sheet to RC when further searching by the Center is desired.

Send copies of the TAP user request form to the appropriate source. Three copies go to the Reference Center for further disposition. Please keep one copy of all request forms for the agent's files. The RC will number the requests.

Make out a TAP request form for "local" requests, hold in the Center till month's end. Send "local" request forms and the log sheets to the RC on the last day of the month. These will be recorded and counted in the Project request totals.

LOG Record the Boulder and "local" requests on the log sheets. Record dates. Record returned "fugitive" information from RC and the dates. Record the sets of "fiche" on the log sheets.

PREP Keep an up-to-date listing of the Kits and the Briefs as they arrive, also the circulation of these. Handle the ordering operations according to the new PREP policy.

NCEC Keep an up-to-date listing of the NCEC materials as they arrive and the circulation of these. List the Title III materials as they arrive and the distribution of these.

RIE & CIJE Keep an accurate record of the arrival of the monthly editions of these journals. Notify Mary Ruth if any volumes do not arrive. Use them in searching.

MICROFICHE Keep a separate microfiche record that indicates the ED number, the number of fiche per document, the arrival date, circulation and return date to the RC. Only the Regional Center will have the record of where the "fiche" is. It is the agent's decision if he wants the subject and title of the "fiche" recorded. Insert "fiche" evaluation form when sending out "fiche" and return these to the Reference Center with the monthly materials. Assist the agent in the "Not Available" document retrieval.

MISC. Gather and package materials as needed by the agent for his clients, and record the circulation of these.

Remain flexible so that whatever the agent must do in the future that is new or different can be handled efficiently.

AGENT:

1. The Agent takes the request from the client. The Agent selects and underlines the key words. (Key words are the important, subject words in the request).
2. The Agent looks up the key words in the Rotated Descriptor Display. (The Rotated Descriptor Display is an alphabetical index to all words that are used as descriptors in the ERIC Thesaurus and is the last section of the Thesaurus). The Agent selects those descriptors that most closely match the key words and the intent of the requeste as only he knows it.

DESCRIPTORS:

________ ________ ________ ________

3. The Agent turns to the Thesaurus Descriptor Listing beginning on page 32 of the Thesaurus. (This lists the descriptors in alphabetical order, by columns on each page He scans these entries. He may select Broader Term--BT (a more general concept), a Narrower Term--NT (a more narrow interpretation) or Related Term--RT (informs one of the existence of a related descriptor). Zero in on the descriptors that fit the request and write terms below, noting if BT, NT, RT. List these under the above descriptors in the columns below.

________ ________ ________ ________

________ ________ ________ ________

* * * * GALS TAKE OVER * * * *

STEP 1: Turn to Subject Section of Research in Education, RIE. Look up the descriptor terms the agent has identified as most significant. Write down the ED number of the titles that look most relevant to your needs. Keep these in the columns under the descriptors they relate to.

ED ____	ED ____	ED ____	ED ____
ED ____	ED ____	ED ____	ED ____
ED ____	ED ____	ED ____	ED ____
ED ____	ED ____	ED ____	ED ____

STEP 2: Look up the Resume (full article including the abstract) by ED No. in the RIE Resu section--first section of RIE. Read the abstract quickly. Does it fit the request? Yes--Xerox page and highlight resume. No--try other ED numbers and repeat process. Please star (the ED's you Xerox.

STEP 3: Finish looking up the other ED numbers according to Step 2.

STEP 4: CIJE (Current Index to Journals in Education). Use the above descriptors and turn to the Subject Index. Turn to the Main Entry Section. Find the title and annotation; read and list pertinent titles and source and page no. found on. Try to keep under above columns.

________ ________ ________ ________

________ ________ ________ ________

________ ________ ________ ________

Remember, this is the first step in this area. The articles must be found and Xeroxed!

STEP 5: Pacesetters (Index of Title III Projects). Look in Pacesetters under subject. Age may eliminate those not applicable before looking up the abstract by ES no. Look up the projects that fit request area. Do whatever is necessary from there . . . list for requester to select most interesting - write to project, etc.

ES ________ ES ________ ES ________ ES ________

STEP 6: Agent evaluates results of the searches and gives materials to the requester. If he determines additional searches must be made to Boulder, please type descriptors on Boulder form and designate type of product desired. If further information is required from the Reference Center, please send this work sheet to RC indicating what is desired

PROCEDURES FOR PROFILE RETURN
(In Regional Center)

1. Locate request in your log.

2. Record the date of profile return, under Agent box.
   Date to user optional to agent.

3. Record anything from the Reference Center on the pink Agent's copy of the original request form, under the lines reading "Any action. ." unless checked in the area above under OTHER SERVICES:

   If a Prep Kit is sent on a request covered by a Boulder Request, just write in the Prep Kit Number, or if microfiche is ordered and sent, list under Microfiche--do not make a separate form unless the request did not go to Boulder.....

   Microfiche needs to be listed on the microfiche circulation sheet also.

Secretary should open mail from the Reference Center: Record on the pink forms and log in materials and place on the Agent's desk.

The agent should write a rough draft of the request plus descriptors for the secretary if it is a Sid.

The agent should designate which Caps, Cat or Pet is needed. The agent should do the selecting as only he knows the request. The secretary then will only have to type it up. The agent should become familiar with the materials included in the packets. A brief perusal doesn't take that much time.

PROCEDURES FOR SECURING INSTITUTIONAL SPECIALISTS

General & Specific

1. Write-up of skills needed to accomplish task.
2. Present to deputy superintendent for recommendation and approval.
3. Contact institutional specialist for availability.
4. Fill out "pink slip" (contract or authorization form).
5. Present to Program Review Committee and Executive Committee
6. If a contract - to State Finance Department, Board of Examiners, for clearance.
7. Contact institutional specialist and arrange schedule.
8. After performing service submit voucher for payment to Auxiliary Services Division.

PROCEDURES FOR HANDLING LOAN EQUIPMENT

General

1. Microfiche selected from files through Document Request Form or from agent's request: pulled, recorded in log, sent to agent's center where secretary records who specifically gets fiche.
2. Readers purchased by project for Centers. Agent handles circulation of these.
3. S.E.A. Reader-Printer handled by Media Division for S.E.A. use. (.15¢ per sheet, $1.00 minimum charge).
4. Portable Reader in Reference Center may be used at no charge.

Specific

State Library - Interlibrary loan of books when possible - informal by phone.

In office material, books, pamphlets, etc., sent to agents and checked out from Reference Center - recorded here and in regional center

Project - Administration pays xeroxing costs (in house).

PROCEDURES FOR SECURING STATE DEPARTMENT SPECIALISTS

Formal

Follow agency policy on personnel - formally issued policy (see attached).

Informal

Call Ken or Kathy

If a team will need deputy approval see Formal Procedure.

More Informal Requests

Contact specialist informally, discuss.
Possibly have to contact Division Administrator, but usually specialist just keeps Division Administrator informed and is free to call or contact individual, or to make arrangement for visits. Reference Center assists with arrangements if desired. Report given to Reference Center Manager generally.

Information on requests being forwarded with explanation of Boulder materials as a several pronged effort to inform specialists of materials, keep them informed and solicit their help when necessary.

PROCEDURES FOR COMMUNICATION AND COORDINATION OF TECHNICAL ASSISTANCE PROGRAM

1. Upon receipt of a request for assistance Dr. Lindsay will probe the problem with the regional agent and the district, and seek consultation of staff within the office to determine scope, schedule and constraints.

2. Dr. Lindsay will formulate a list of resources, competencies and divisions to be involved.

3. Dr. Lindsay will meet with Dr. Winget for review of the problem, etc.

4. Dr. Lindsay will contact division administrators for assignment of members to the technical assistance team within and without the agency.

5. Dr. Winget will contact Dr. Hall and Dr. Campbell where appropriate.

6. Dr. Lindsay will meet with Dr. Winget for designation of leadership for the team.

7. Assignments to team members will be made by division administrators and detailed explanation will be made by Dr. Lindsay.

8. Assignments out of agency will be contacted by Dr. Lindsay.

9. Refinement of problem will be made by task force and performance criteria developed.

10. Appropriate communication will be made within agency and dissemination will be given attention.

PROCEDURES FOR ASSESSING CHARGES AND COLLECTING

General

1. Present - none.
   Future - yes - not yet determined.

2. Possibility of charging for PREP.

3. Possibility of charging for searches - Boulder or own Query.
   a. University coordination is excellent and could bring these people in.

4. No charge for state library searches.

5. Media Division charges for Hard Copy - .15¢ per page, $1.00 minimum only at present time.

Specific

Project pays for subscriptions - magazines and fugitive materials.

Project pays for microfiche collection 1968, 1969, 1970 and 1971.

Project pays for books if necessary.

Project pays for equipment to house "fiche" - four cabinets and one more to come. Two file cabinets for records.

PROCEDURES FOR PREP PACKETS

General

1. Order 100 copies of those deemed most essential to project and distribute 20 to each Center of PREP materials that interest the project people. Decision based on Agent's needs.

2. 200 Briefs distributed:

    N. U., Norm Kohler -- 52
    C.S.A., Ruth Nielsen -- 50
    S. E., Robert Hanson -- 40
    S. W., Jerry Hawley -- 25
    USAIL -- 5
    Special Education -- 5
    JoAnne Gilles -- 1
    S.E.A. -- Individual briefs distributed to specialists and clients at Reference Center Manager's discretion

3. Xeroxed one copy of all back issues so all four agents have one copy of each Kit. Keeping current with purchase. If not one of particular value distribute one Kit to each Agent that comes from USOE (five single copies).

NCEC

Early Childhood: USOE supplied enough for each to have one set gratis.
Reading: One sent to Center (USOE) belatedly. Four others had to be ordered at project expense.

Ken Lindsay
Individual

JOB DESCRIPTION

Time %	Item (description)
	1. Coordinate Technical Assistance Project.
1 - 2	2. Represent Technical Assistance on Planning Council.
2 - 4	3. Represent Technical Assistance on Administrative Council.
4 - 6	4. Represent Technical Assistance on Division Administrative Council.
5 - 8	5. Represent Technical Assistance on Executive Committee.
1 - 2	6. Fiscal officer for Technical Assistance Project.
2	7. Monthly meeting of total Technical Assistance Staff.
1	8. Arrange for Technical Assistance personnel.
1	9. Coordinate #8 with Kathy.
.25	10. Prepare reports for USOE.
	11. Write continuation proposal
	12. Training of Agents (see #7) with Kathy.
2 - 4	13. Coordinate Technical Assistance with other Federal programs.
1 - 3	14. Explain Technical Assistance to other State office personnel.

Mary Ruth Haslam
Individual

JOB DESCRIPTION

Time %		Item (description)
	1.	Record and log all incoming requests - number, date and give to Reference Center Manager to review and send to Boulder or elsewhere.
	2.	Record and log all incoming profiles, package and mail.
	3.	Prepare profiles for Reference Center Manager to review.
	4.	Package and mail all outgoing materials from Reference Center.
	5.	Type and do MF section of monthly reports, keep records of and mail.
	6.	Record circulation of microfiche.
	7.	Recording of dispersal of PREP and NCEC materials.
	8.	Correspondence.
	9.	Handle the technical intricacies of ordering materials.
	10.	Pull microfiche.
	11.	Gather and prepare information retrieval materials for distribution .
	12.	Xeroxing.
	13.	Record project statistics.
	14.	Take requests occassionally.

Kathy Wallentine
Individual

JOB DESCRIPTION

Time
%

Item (description)

1. Develop Information Retrieval Center and its services.
2. Develop policies and procedures for Information Retrieval for the Technical Assistance Project.
    a. Review all requests.
3. To work closely with Agents in information retrieval.
4. Make monthly and quarterly reports.
5. Receive and supply information to State agency personnel.
6. Receive and supply information to USAIL, Utah individualized curriculum writing project.
7. Supervise the mechanical procedures of receiving and recording requests and sending out materials.
8. Evaluate the information products.
9. Do the searching necessary in response to local requests and expansion of Boulder requests:
    a. University of Utah
    b. Salt Lake City Board of Education Library
    c. Own files of fugitive materials
    d. Specialists (State)
10. Write and have produced all newsletters, flyers, transparencies, brochures and publicity - Courier, News, Notes & Quotes, Mediator - advertise Project - products and information services.
11. Order materials and resources for Center.
12. Direct the circulating of microfiche collection and supervise the recording of microfiche.
13. Correspondence concerning Information Center.
14. Attend, help and plan monthly project meetings. Attend S.E.A. staff and Media meetings.
15. Do whatever role as Media Specialist in S.E.A. is expected to do, i.e., handle the collection and storage of agency produced publications, supply information for Mediator, supervise gathering of media material for Courier.
16. Occassionally give presentation advertising the Project.
17. Develop and coordinate the linking capacity of the Information Center with various information agencies in the State.

March 16, 1971

given to crossing over division lines in emergency situations when large jobs need to be done. This will be discussed in the next Administrative Council.

5. Dr. Talbot said "We now have enough reports and recommendations on what we ought to be doing to last us for at least three years. Now let's get busy and implement them."

6. Dr. Lerue Winget reported on a conference on "Revenue Sharing." The consensus of the committee was that the new plans seem to be about the same programs "stirred lightly with a spoon." The additional money allowed in the President's proposal might be written so that it would go to governors and they would designate an agency to handle the money. Educators are very concerned about that. "The program is actually just grant consolidation," Dr. Talbot said.

7. The increased number of bomb threats was discussed. In New York 24 of 100 threats are real. A check will be made to see if our preparedness manual was ever adopted by the State Board of Education. It includes a section on how principals should handle bomb threats.

8. A study will be done on the length of the school day, week, and year since the legislature expressed interest in the problem. Representatives from UEA, the Utah School Boards Association, and the Society of Superintendents will be involved with personnel from this office. Research and Innovation are now reviewing the literature on the subject and what is being done in other states. Dr. Winget and one board member will attend a conference on the subject March 24-26 in Cocoa Beach, Florida.

9. Authorization was given for Dr. Kenneth Lindsay and his Technical Assistance Project to continue the services of the computers at Boulder, Colorado, even though the service will not be free next year. In addition, $1,000 will be spent to try out a new QUERY system which involves purchasing two tapes a month for our computers.

10. A form has been designed for districts to request services from this office. Districts do not need to use it, a telephone call will still suffice. The form will be to help them solidify the reasons for asking for help and to help us know better just how to serve them.

11. The Committee re-emphasized that we will no longer refer to the State Board of Education as the State Board for Vocational Education. One name is enough.

JW/me

REFERENCE CENTER MANAGER

Goals	Programs	Objectives	Projects	Leadership Responsibility	Budget
		To duplicate for sale copies of audio and video programs within one week of receipt of order.			
		12. To promptly (within one week of receipt) fill all orders from school districts for agency publications (Guides, etc.) and curriculum materials and where appropriate to collect payment for same. and To develop and have operational an agency-wide system for inventorying, warehousing, shipping and billing agency publications and curriculum materials by September 1, 1972. and To have to agency publication section for printing by 1 October 1972 a catalog of agency materials available for sale, and to distribute this catalog to all districts and schools within one month after it is received from publications.	.12 Agency Publications Media Distribution	Wallentine	$5,522.
	3. Staff Productions. The production of needed media materials; i.e., overhead transparencies, audio and video tapes, etc. as requested by staff and cover layout work for agency publications.	1. To produce for and with other agency staff, materials needed in their assignments as requested.	(.01 - Staff Productions) .0101 Admin. Div: Admin. .0102 Admin. Auxiliary Serv. .0103 Admin. Printing & Budget Sec. .0104 Admin. Planning Unit	Gillespie " " " "	$23,604.

[illegible] Goals	Programs	Objectives	Projects	Leadership Responsibility	Budget
To assist district and agency staff in decision making by providing methods by which they can obtain pertinent data and to provide media equipment and materials for agency personnel in the pursuit of their respective assignments.	2. Agency Media Center. A program which provides typical media support services for the agency such as a professional media collection, media equipment, etc. Also provides only reference services for district and school personnel, and text-book adoption.	1. To develop and operate an educational reference and information center for use of Agency, Regional, and District.	.01 Reference Services	Wallentine	$13,916
		2. To procure, house, maintain, and circulate to agency personnel media equipment as requested.	.02 Media Equipment; Procurement, Inventorying, Maintenance, Storage, and Circulation.	Hansen	4,095
		3. To maintain an up-to-date catalog of all agency media materials.	.03 Agency Materials Cataloging	Wallentine Lewis ~~Tobias~~	7,990.
		4. To maintain an up-to-date record of all periodicals being purchased by the agency indicating their locations, and to provide each division administrator, superintendents, and agency and administrator assistants a copy of this record on 1 July, 1 October, 1 January, and 1 April.	.04 Agency Periodical Inventorying	Wallentine	697.
		5. To maintain a slide file for use by agency professional personnel filing all appropriate slides within two weeks after receiving them, and to maintain up-to-date ERIC and professional collections.	.05 Special Collections; i.e., Slides, ERIC, Prof. Media Material, General Educational Material	Wallentine	2,555.
		6. To train agency personnel in the operation of media equipment by conducting at least 5 training sessions during the fiscal year.	.06 Equipment Operations	Hansen	920.

RESPONSIBILITIES OF
REFERENCE CENTER MANAGER

CHAPTER IV

GENERAL OVERVIEW OF FIELD AGENT PROGRAM

Role, Function and Activities of Utah Field Agent
  Agents
  Project Training

Procedures
  The Project Area
  Agents and Information Retrieval
  Quotes from Agents

Activities of the Project During 1971

Current Activities

Personal Reports

Summary

APPENDIX:

The Lindeman Report

NIE Publications and Materials

Questions and Answers About IDI

Technical Assistance by Jerry Hawley

RISE and ERIC Data Base User's Agendas

Case Studies

GENERAL OVERVIEW OF FIELD AGENT PROGRAM

The Extension Agent Program was well described by NCEC in the following manner:

Agents to provide personal linkage. The objective is to help educators and school boards to benefit from succcessful programs and practices developed elsewhere. In his activities, the educational extension agent will reverse the usual dissemination pattern. Instead of one organization--the Office of Education or a State educational agency--disseminating information to many unknown and unseen users, agents can help educators define their problems and then bring to them information about alternative, tested solutions to their problem. The agent can also followup to see what additional information, sample materials, consultants, or other necessary aid is provided to implement agreed-upon improvements. The agent will become a personal link between developers and potential users of educational improvements. By providing feedback on obstacles and aides to adoption of improved practices, the agents can contribute as well to a better understanding and management of renewal programs.*

All agents, however will live and serve educators in specific districts, counties, or those districts included in an intermediate unit.

The goal of the educational extension agent program, however, is not to build a vast system of Federally-supported agents in all school districts. Instead, the purpose is to demonstrate the benefits of their activities and to stimulate state, local or other agencies to develop cadres of educational extension agents under their own funding.

Agents to have information retrieval help. Comprehensive information service units will be established within each state education agency to provide fast retrieval of needed information to agents for their personal delivery and interpretation to educators. The National Center for Educational Communication of the Office of Education will arrange to keep these state information units supplied with information about a wide array of tested instructional materials, programs and practices and current knowledge relevant to education.

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*For a discussion of Linkage see p. 30-36 of Needed Research On Research Utilization.

ROLE, FUNCTION AND ACTIVITIES OF THE UTAH FIELD AGENTS

General Objective A of the original proposal reads: "The project will establish a reference center with the State Education Agency and build the reciprocal relationships necessary for successful linkage of the resource and user problem solving strategies.

The "linker" or field agent is the key variable in the Utah Program. The qulifications, personal and professional, which characterize the successful field agent were the most significant unknown of the Pilot State Dissemination Project in its inception.

Utah's original proposal envisioned the resource agent in the following role:

> Three project resource agents will be placed, one each, on the staff of three Cooperative Service Units in Utah. In the second year of the project, a fourth resource agent will be placed on the staff of an additional service at state expense. They will be the link between clusters of LEA's and the SEA. To provide such linkage, the resource agent will be essentially a staff member of a cluster of LEA's.
>
> He creates awareness on the part of LEA of the resources and assistance available through the SEA. He encourages the LEA's to seek help, first on an Ad Hoc basis, and help with projects and eventually with assistance in problem solving and planning. He facilitates the LEA's requests for help and the SEA's response.

AGENTS

The original agents were: Voyle Munson (Cooperative Service Agency), Jerry Hawley (Southwestern Educational Development Center), and Norm Kohler (Northeastern Utah Multi-District Cooperative Education Service Center). Soon after the inception of the project, one other area serviced by Robert Hanson (Southeastern Utah Education Service Center) was added to the project. Though this agent does not receive direct financial support, he has availed himself of the retrieval services. The next change occurred when Ruth Nielsen replaced Voyle Munson. The latest change in the original plan has been the addition of Dave Church, who works with Jerry Hawley and has taken the elementary responsibilities in the Cedar City area, while Jerry has assumed the secondary role. This has been a most amicable and profitable arrangement.

PROJECT TRAINING

Soon after the project was funded the project director attended training seminars designed to prepare educators in the State Department of Education to become "change agents" or "process helpers" by following the Havelock Model. The Training Model developed by Dr. Havelock stated:

"A successful graduate of the training seminars would know how to:

(1) Build helping relationships with a variety of clients and client systems.

(2) Diagnose client needs including the identification of weaknesses and strengths and basic systemic features, formulation of needs as problems, and statement of change project objectives.

(3) Acquire resources relevant to diagnosis, including print, persons and products as required from internal and external sources.

(4) Generate a range of solution ideas and choose among them collaboratively with the client, evaluating criteria of benefit, workability and acceptability.

(5) Develop strategies and programs to gain acceptance of the chosen solutions by the client system as a whole.

(6) Design and install mechanisms which assure the client of a continuing capability to innovate, adopt, and adapt (self-renewal) with respect of this and other innovations.

(7 thru 12)
Of equal importance to the above six skills is a corresponding set of training skills to impart these skills to others and to teach clients to be their own problem solvers.

(13 thru 18)
Additionally for each of these same set of problem-solving skills the trainee-graduate should know how to gain further training for himself and others. In other words, he should be a resource expert on each of the six stages of problem-solving.

(19) By the end of training the graduate should be on his way to becoming an articulate spokesman for the planned change process generally, and, specifically, for the role of the state agency within it.

(20) The graduate should have the ability to develop evaluative criteria and to design evaluations for the change projects in which he is involved. We do not see him as an expert evaluator or researcher, but he should have enough knowledge and skill in this area to work effectively and collaboratively with more expert evaluators both within the State Education Agency and outside. He should have the ability to call upon individuals with requisite skills in these areas when and to the extent necessary."

The training materials from these seminars and the concepts learned became the agendas of subsequent meetings of the Utah Technical Assistance Project staff.

Originally agents were chosen to serve as a personal linkage between individuals who wished to get information and the possible sources of information at the State department level. Just how they were to do this was vague to all of us. In Utah these agents were physically housed and organizationally placed in regional service centers, each of which served from six to nine school districts. These service centers were created and funded by the State legislature but were not intermediate units of the State Education Agency. As the name implies they were service agencies and as such had no administrative clout. Agents did not know their administrative relationship to clients or to State Education Agency personnel.

Each agent began operating among those clients with whom he felt comfortable. Some worked with teachers, others with administrators. One saw himself as an information messenger. Another agent felt that he should start at the top (with superintendents), help them to do a "needs assessment" whereby critical educational problems would be identified, and then help provide the resources, both human and information, which would help in the solution of the problem.

It was deemed unwise by the project director, after conferring with State Agency Administrators, to try to make each agent fit a mold. The purpose of the project was to test the effectiveness of the field agent concept and agents functioning in different ways would help determine successful approaches to the task.

The work of the Columbia University Evaluation Team has been very helpful in highlighting some of our successes and failures and the suggestions contained inreports of Karen S. Louis, "Field Agent Roles in Education, I, II, III," have been studies, some already implemented and the remainder placed on the agendas of future in-service meetings of project personnel.

Report No. I contained the following suggestions:

"1. Meetings with large groups of people can create a certain level of awareness, particularly among individuals who are already predisposed to use a variety of resources in gaining information.

2. Meetings with small groups of teachers seem to be a very successful technique of stimulating interest in the program.

3. Prior familiarity with certain individuals or school systems tends to facilitate understanding between field agents and potential clients.

4. It is unwise and ineffective to emphasize the need for indepth diagnosis of problems when explaining the program.

5. All of the field agents generally agree that it is important to gain initial acceptance, if not enthusiasm, from top administrators before proceeding to lower levels of the school system.

The following strategies were devised to accomplish each of the suggestions:

Suggestion No. 1 - Large group meetings: Each agent has requested of the superintendents of the districts he serves an opportunity to meet with and explain to the total district staff in the opening institute of the school year (held before school starts in the fall) the Technical Assistance program.

Suggestion No. 2 - Small group meetings: Each agent schedules a meeting each year with every faculty in all of the districts he serves. All of these schools are small rural schools and none of the faculties would be considered a large group.

State Education Agency project staff will meet with each of the divisions of the State Education Agency frequently.

Agents have arranged meetings with small groups of teachers in a given subject matter field, i.e., Mathematics, Scoial Studies,etc.

Suggestion No. 3 - Prior familiarity: The agents have been asked to use a strategy often used by salesmen wherein the agent begins to work with friends and close acquaintances. Then the friend is to interest one other person in the Technical Assistance program and so on.

Some friends have been department chairmen or district supervisors and their sphere of influence is greater.

Suggestion No. 4 - Don't press diagnosis when explaining the program. From an original "hard-line" attitude which said, "get at the real problem", agents were advised to ease up, to let the program sell itself and to become truly a "process helper" rather than "process expert."

Suggestion No. 5 - Gain acceptance at the top: Each of the agents is attempting to meet frequently with his service center's Board of Superintendents to keep the program constantly before them and to provide the services of the project to the Superintendents. Hopefully superintendents will use and appreciate the service and then tell others of the assistance received.

PROCEDURES

The Project Area

The area covered is 52,487 square miles. The Regional Centers serve 25 districts. A chart indicates the breakdown of number of students served, number of elementary schools, secondary schools, and approximate number of teachers and principals that could be served by the project.

Mrs. Ruth Nielsen, Agent, Central Utah Cooperative Agency, located in Richfield, serves Juab, North Sanpete, South Sanpete, Sevier, Piute and Wayne Districts.

Mr. Jerry Hawley and Mr. Dave Church, Southwest Educational Development Council in Cedar City serves Iron, Beaver, Washington, Kane, Darfield and Millard Districts.

Mr. Norm Kohler, Northeastern Utah Multi-Media District Cooperative Educational Service Center, located at Heber City, serves Wasatch, North Summit, South Summit, Morgan, Rich, Duchesne, Uintah, Daggett, and Park City Districts.

Dr. Robert Hanson, Southeastern Education Service Center, located in Price, serves Carbon, Emery, Grand, and San Juan Districts.

The ReferenceCenter itself handles information retrieval requests for the State Education Agency, U-SAIL, a large Title III individualized learning project, individuals involved in Title I, Title III, and Teacher Leadership programs, and various other information centers in the area.

A flow chart has been developed that identifies the procedural flow of requests from the individual to the agent to the Reference Center to BOCES and back and also indicates the route of microfiche circulation.

It has been found that placing the agents in a Regional Center was strategically viable. The agents serve in various ways in the Centers. Norman Kohler serves as a resource to Center personnel and involves them in his work. Ruth Nielsen has been given responsibilities in the Social Studies area. Jerry Hawley serves as the director of the Southwest Media Center. Dave Church works with the Elementary segment of this Center as Jerry's assistant. This Center is Media oriented. Dr. Robert Hanson's capabilities are in the Special Education area and the programs in Price center around this field.

The agents have been excellent resources to the individual specialists located in the Regional Centers. They can provide fast and current information, as well as State Agency contact for these people and the specialists, in turn, act as agents in carrying materials and advertising the Technical Assistance Program. Many times the Reference Center will be called by specialists in the Centers for reference materials.

Each agent has a half-time secretary who does clerical work, does some searching of RIE and CIJE collections and assists the agent in filling local requests. The ERIC indexes and PREP have been placed in each Center, paid for by the Technical Assistance Project. Four portable Bell & Howell Microfiche Readers have been placed in the Centers. The agents circulate these with the microfiche to the clients after the client has identified the fiche he needs from the BOCES abstract packets. A reader printer is housed in the Media Division. This machine supplies hard copy if necessary. An added boon to the project has been the purchase by the Utah State Archives of a microfiche duplicating machine. Archives personnel provide to the project fiche to fiche duplication when the need arises.

Agents and Information Retrieval

Pre-packaged materials - The Utah project has differed from the other two Pilot states in that it has utilized pre-packaged abstracts from the Boulder Retrieval Center. Oregon still uses these to a small degree for backup of their computerized system. Many pros and cons have been written on this subject by the project evaluators and others.

It has been stressed that the use of pre-packaged materials*engenders a "numbers" approach to retrieval and that the quality is not as evident as in "individualized" searching. On the other hand the pre-packaged requests seem to fit requests of a more general nature and are geared to raise the awareness level and probably cost effective.

Several areas need to be looked at in this regard. One is that we are filling the need of the client. The agent knows that client and is communicating with him. He takes his cue for the definition of the request, hopefully from the client. It must be admitted in the latter months of this program, due to costs, types of materials ordered and pending changes in the system, the project has had to put other considerations, at least philosophically, in the way of precise retrieval.

The Current Awareness searches being labelled what they are, an excellent service and one that though the Utah program may not have access to in the future, may be done on a selective dissemination basis in the retrieval center. There has not really been the demand for this type of service to justify giving this top priority. The total searches from July 1971 - July 1972 of 171 CAP searches bear this out.

The philosophy behind the CAT searches in their initial development was that they were devised on the basis of individual requests. The project feels generally that these searches have been adequate, though not right up to date, to give latest information on the subject and worthwhile, as Boulder states, even though the ED number is an older one, it may have been the most relevant material available on this subject obtainable. The biggest distinction found in the pre-packaged materials

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*Loya Metzger's comments on the use of pre-packaged materials are effective but the project has used these with the problems defined, in mind, and in one agent's "words" it is a slow process to bring clients unfamiliar with research, to the point of utilizing it effectively and the packages have provided an intermediate step in the process.

is not really in the material presented but in the format...comparing the CAT, CAP AND SID - all give out computer printed ERIC abstracts, while the PET is a packet of xeroxed articles from well known educational journals. Although not ERIC materials** this has been the most popular and has been one in which clients have been greatly pleased. The article is there to read, the conclusions are there, it is a familiar form of learning, and no further judgement of relevance is necessary, nor further delays or action to provide readers, for full documentation. All agents have found these extremely useful and some modification of these is hopefully contemplated as the retrieval of the project moves toward a localized function.

Quotes from Agents:

Jerry Hawley - "We are especially happy with the PREP Kits and PET packets which we have received and feel strongly that this service should be continued. Our clients have expressed a desire to keep them posted on the latest developments in specific areas and have indicated that the Boulder materials are an excellent means of doing this."

Ruth Nielsen - "Clients really like the PET packets."

It is only fair to state, at this point, that the most of the requests generated from the State Agency and clientele of the Reference Center have generally been SIDs. These clients are in a good many cases researchers and sincerely needful of more specific information. The project has found in a good many cases the request must follow the dictates of the individual client's cue. Generally clients do not wish older material. Many times they do not want research. It is necessary to provide the capability of searching a back history file, but this is not extensive. A recent study was done on a sampling of 100 requests and a close study of several packets to see exactly what kinds of information was really generated. The conclusions were that though the word "research" is used significantly in many requests, it has been the habit of the project to use "research" to lump together many requests. The project has used the term loosley. Research as used by the project can be exemplified by the following quotation from C. F. Kettering, "Research is a high-hat word that scares a lot of people. It needn't. It is rather simple. Essentially, it is nothing but a state of mind--a friendly, welcoming attitude toward change." Few requests, at least this month, were significantly for research materials. The main conclusion coming from the study was the need for a very wide variety of information sources and for information of all types from each subject area to be able to fill the needs of the clients, rather than one type being more specific or useful than the other. (See Appendix , The Lindeman Report). This we feel gives a great credence to the rationales used in developing linking centers and that no one center or library can provide all that is needed, but the capability to find the information wherever it resides certainly is a necessity.

**1. Do not receive the individual tailoring of the SIDs.
2. Frequency of updates is a problem.
3. Clients being given a list to select from aren't urged or invited to define needs and problems of information.

A good many requests come to a Retrieval Center from the agents and the State Agency personnel that are almost impossible to locate. It has been the practice here, to search as long as possible to find these materials. Some examples are: 1. Needs assessment materials, 2. Individual programs that clients read about, such as the DeWitt, New York or the Ad Reading Program, and 3. Specific new instructional materials. The requester usually has little information on the topic.

It will be necessary for new centers to have a policy defining various levels of requests, the amount of information that is needed before a search is begun, and the amount of time and staff that can be dedicated to this ephemeral type of activity.

In retrospect, however, searching for these topics have provided the center with fine relationships with some specialists, as well as developing reciprocal relationships with other centers and information agencies. Without adequate staffing this type of searching should be curtailed.

Any aid the governmental agencies of the State Agency can give in identifying viable and evaluated resources is the best service that could be rendered a retrieval component servicing agents in the field.

The NIE task force on Dissemination (formerly NCEC) has rendered a great number of valuable services to retrieval centers since 1970. Some of the "hard to find" information nedds cited above will be answered through its publications and materials. Some of the materials that have been and will be of great value as they are developed are cited in the appendix. (See Appendix , NIE Publications and Materials)

ACTIVITIES OF THE PROJECT DURING 1971

The project staff has been involved in many exciting activities in addition to the regular practice of meeting clients, processing requests for information and/or human resources, and following up on the new needs the filling of the first request might generate. Some of these have been:

1. The monthly meetings of project staff - we have tried to do at least three of the following in each meeting:
   (a) A presentation by a resource person. Some of these have been: Division Administrators of the State Education Agency, Far West Laboratory Dissemination Director, etc.
   (b) Interaction with developers of exciting and innovative programs; i.e., Structored Tutoring, Project SPREAD, Project IMPLODE, etc.
   (c) Report of new resources available to the agents.
   (d) An open discussion of successes and failures that agents have had. This inter-change of ideas and practices has been very useful.
   (e) Demonstrations by salesmen of equipment and materials that might be helpful to an agent.
   (f) Training in manual search techniques.
   (g) On-site visits to innovative educational programs which help the agents become better generalists.

2. Two of our agents have met at the beginning of the school year in all of the district's teacher institutes and have been given time to explain the Technical Assistance Program.

3. All of the agents have met with school faculties to make a presentation and to explain the Technical Assistance Program.

4. The Reference Center Manager has arranged for the N.C.E.C. developed Education Products Display to be presented in the Convention Center during the Utah Education Association's annual conference this September. It is estimated that from 5,000 - 10,000 educators will view this display.

5. The project staff has been given the responsibility of disseminating information about local innovative programs. Meetings have been held with local project directors and tenative plans presented to the State Education Agency administration for a dissemination strategy which works hand in glove with Technical Assistance Project staff.

6. The Technical Assistance Project staff has cooperated with the Media Division of the State Education Agency to develop in each Regional Center a "film depository". The field agents have worked with local districts on a program whereby most of the films from all the schools of the regions are sent to a central depository (the regional service center).

When this number of films reaches 500 the State Education Agency gives the center about 250 films. This collection of films is augmented each year by the State Education Agency with 20 to 40 new titles. At present the average number of films in each center averages nearly 1,000.

7. Inter-school visitations. The agents have arranged for many visits by educators to innovative and exemplary programs. Some have been out-of-state but most visits have been in state.

8. Many resource people have been provided to local schools through the project. Some of these include: NAACP representatives, Sierra Club representatives, business and industry personnel, university personnel, State Education Agency personnel, members of other departments of state, county, and city government.

9. The project staff has attended meetings of many State Education Agency divisions to explain the program and interface Technical Assistance and division activities.

10. The services of the State Archives Division has been obtained free of charge. This service includes all fiche to fiche reproduction and assistance in producing original microfiche if the need arises.

11. Cooperation with the Utah Historical Society. The last bulletin of the Society gave an explanation of the Technical Assistance Program and told how the work of the Historical Society had been assisted by the Technical Assistance Project.

12. Attendance of various project members at Dissemination Conferences, Eric Tape Users Conferences and other sessions introducing new centers to the system.

CURRENT ACTIVITIES

Educational Extension Agents may effect educational change in many ways. Utah agents have been involved very heavily in recent months in promoting and teaching the IDI - Instructional Development Institute Program. An IDI is - A validated training program in eight (8) units (approximately 40 hours) designed to provide teams of teachers, administrators, board members and specialists (TABS) with initial competencies and skills in applying an instructional systems approach to the development of practical solutions to critical teaching and learning problems. (See Appendix , Questions and Answers About IDI.)

Agents Ruth Nielsen, Robert Hanson, Jerry Hawley, Dave Church, and Norm Kohler are going through the IDI training and are becoming trainers for others, as well as conductors of other IDI's throughout the region. IDI's are being planned through the Regional Centers with the Extension Agents doing the organizing. These IDI's reach many teachers and administrators and have been found to be a very effective means by which educators identify their own needs. A schedule of IDI's is attached.

Another dissemination project that has taken a good deal of the Agents' time this current year has been the setting up and running of the Far West Minicourse Program. This began on a rather small basis last year, but the demand has been great and the agents have been doing the organizing for these in service programs in the rural areas.

Another coordination with the Far West Lab has been with the Education Information Consultant (EIC) training package. The project staff is currently going through the information retrieval program.

IDI

DATE	PLACE
October 16-20	Cedar City, Utah
October 16-20	Boulder, Colorado
October 23-27	Pueblo, Colorado
November 13-17	Weber Dist., Utah
November 26-December 1	Haxton, Colorado
December 4-8	Alamoso, Colorado
December 4-8	Themopolis, Wyoming
December 11-15	Torington, Wyoming
January 22-26	Heber City, Utah
January 29 - February 2	Salt Lake City, Utah
March 5-9	Casper, Wyoming
March 12-16	Denver, Colorado
June 4-8	Price, Utah
June 11-15	Provo, Utah
June 18-22	Ogden, Utah

PERSONAL REPORTS

As stated earlier the project has learned there is no one way to proceed. To illustrate this and to provide a more personal and direct impression of the Field Agents and their activities this section will be dedicated to reports from the agents.

Jerry Hawley wrote a brief paper in 1971 that described his method of operation. The paper was reprinted in the Information Dissemination Report published by the South Carolina Project, Volume 1, Number 4, August 1972. (See Appendix , TECHNICAL ASSISTANCE, by Jerald Hawley and David Church).

The concepts that have seemed to be some of the most important to the project are listed below and the agents' responses are attached:

1. Establishing Contact with Clients - Building the Relationship.
2. Follow-up Activities of the Agent.
3. Ways of Evaluating Your Own Work.
4. Work Load in Relation to Building the Relationship or Work Priorities.
5. Levels of Access - Or Who you Serve Most and Why.
6. Cooperation Within Intermediate Organization (The Regional Center).
7. Information Needs or Whatever - Retrieval Systems.

1 - ESTABLISHING CONTACT WITH CLIENTS - BUILDING THE RELATIONSHIP

The most important phase of our program is establishing contact with the client and building a relationship. This involves leaving with the client, whether it be an administrator or a teacher, the feeling that you are completely neutral and are not pushing an idea of the administration of the State Department. This neutrality of position coupled with a sincere intent to help your client is a most important factor in establishing a clientele to work with.

2 - FOLLOW-UP ACTIVITIES OF THE AGENT

Follow-up activity should occur within approximately two weeks of your initial visit. When you can do this, it appears from my experience, that you have more success and input in determining the outcome of the situation.

3 - WAYS OF EVALUATING YOUR OWN WORK

Sometimes an individual receives letters expressing a client's thanks or feeling towards the help received. However one of the most successful evaluation instruments I have used is a check-the-blank type letter asking the client to respond to the problem in terms of the following: 1-The client's follow-up action; 2- An example how the information was used; 3- What additional follow-up action should the extension agent now make.

4 - WORK LOAD IN RELATION TO BUILDING THE RELATIONSHIP OR WORK PRIORITIES

As the project has progressed and the work load has increased, the involvement on many problems has become much more complex. At this point an agent realizes a reduction in building the relationship with new clients and enter into a phase of concern for more quality work rather than quantity.

5 - LEVELS OF ACCESS - OR WHO YOU SERVE MOST AND WHY

An agent must be prepared to serve the administration and the teaching staff equally. Hence the necessity of neutrality talked about in item number 1 - Building the Relationship. In many instances the organizational structure of the school determines much concerning the agent's access. Into this picture enters all types of problems such as authoritarian type leadership, jealousies, personality clashes among clientele, etc. These items are not controllable by the agent but definietly determines your access potential. I feel that a good ratio would be 50% administration, 50% teachers.

6 - COOPERATION WITHIN INTERMEDIATE ORGANIZATION (THE REGIONAL CENTER

If working in a regional center or intermediate organization, the most important resource an agent can have is the cooperation of his colleagues whereby as they go into the field and identify problems they also can identify an agent's potentiality for input. The same is true of the agent as there will be times while he is in the field that he will identify problems that persons within the regional center can successfully handle. The cooperation between both parties is essential for the growth and progress of education.

7 - INFORMATION NEEDS OR WHATEVER - RETRIEVAL SYSTEMS

Past experience indicates that the availability of research materials, etc. in the following areas would greatly help: physical education, dramatics, business, occupational skills pertaining to business, music, art.

CSA

COOPERATIVE SERVICE AGENCY

Serving the Students of South-Central Utah

P. O. Box 607
Richfield, Utah 84701
Phone 896-5185

November 22, 1972

M E M O R A N D U M

TO: Kathy

FROM: Ruth Ruth

Ruth Nielsen reports what has been learned in the past two years regarding the following topics:

1. Establishing contact with clients - building the relationship.
   a. Face to face contacts are best - especially needed for first contacts.
   b. Be reliable - meet all appointments - respond to mail references, etc.
   c. Make honest effort to get exactly what client wants.
   d. Offer him alternative information.
   e. Make contacts for him.

2. Follow-up activities of the agent.
   a. Make one to one, face-to-face follow-up if possible.
   b. Get committments and dates for future continuum.
   c. Evaluate with client, continue or recycle.

3. Ways of evaluating your own work.
   a. Clients consult with you again.
   b. Trusting you with personal educationl data.
   c. Request from other clients who have heard about you from past clients.
   d. Further requests from "old" clients in new areas.
   e. Invitations to come and make an appraisal of what is taking place in the classroom, curriculum, development, etc.
   f. Clients get up tight that you can't give them more time or help.

4. Work load in relation to building the relationship or work priorities.
   a. We haven't had enough time to become thoroughly acquainted with all our clients.

b. Priorities are hard to establish.
c. Secretarial help is to spread out and turn overs create a a back log of work.
d. We need paraprofessional help for searches.
e. Many duties other than research have become assigned to this position.

5. Levels of access - or who you serve most and why.
   a. Teachers (they earnestly seek to improve teaching or pressure is placed upon them to improve).
   b. Principals. They like to keep on top of what the teachers are or should be doing to improve education for each child.
   c. District administrators. They like to keep on top of what the teachers are or should be doing to improve education for each child.

6. Cooperation within intermediate organization (The Regional Center).
   a. We make constant referrals to each other and for each other.
   b. We have staff meetings.
   c. Consult with each other for necessary information.

7. Information needs or whatever - retrieval systems.
   a. A model for particular areas to put research into practice.
   b. Much more information and models for secondary schools - (specific areas). Example, subject: areas, mini courses).
   c. Secondary teacher specific skills and motivations defined.

Anything you would like to volunteer we will be delighted to insert.

Friendly approach - shake hands - or talk about something related to client - ask his opinion of some related subject. What can we do to help you? Referrals. Careful school or name dropping of what others are doing. Use note pad. Check and fill immediately if possible or send letter concerning the request - List request - an immediate suggestion is often helpful - be cognizant of time and situation - don't talk too much.

Robert Hanson

CLIENT-AGENT

1. Establishing Contact With Client - Building Relationships

Letters, bulletins, etc. that summarize different items of research or complete articles are periodically sent to all schools and are made as interesting as possible. Participation in workshops, conferences, and faculty meetings is important. However, informal, supportive and non-threatening personal contact seems to be the most successful. Referrals received by word of mouth from one client to another often lead to successful relationships.

II. Follow-up Activities

After the agent has pursued the five-step model in assisting the client, it is all for naught if he does not evaluate the feedback and provide onsite assistance to the client in putting into practice the change on innovation.

III. Evaluation of Work

The agent subjectively evaluates his work based on feedback from clients, and comparisons between other agents' work and his own. The amount of requests for information does not seem to be related to the actual amount of change or innovation incorporated into the system. Documentation of activities is maintained in the agent's office.

IV. Work Load and Work Priorities

The agent has to establish priorities since there is not enough time to work with every individual. Information requests should be handled as just that. However, the agent must be sensitive to his clientele and know when there is an opportunity to instigate a valuable change. Knowledge about the schools, staff, students, present curriculum, and needs of the school is essential in determining these priorities.

V. Levels of Access

The district's administrative and teaching staffs are most cooperative. Projects to date have been distributed about 50-50 between administrators and teachers. The large number with administrators probably results from the agent's position in the regional center.

VI. Cooperation Regional Center

The agent is the director of the regional center. This makes it difficult to determine if the excellent cooperation of the center's staff is the result of administrative authority or the desire of other individuals to participate.

VIII. Information Needs

Turn-around time on informational requests needs to be shortened. Informational banks at a local level need to be improved.

1. Establishing contact with clients---building the relationship.

To identify what we have done to bring about the present positive relationship between the center staff and the educators of our area is not an easy task.

The first step is letting the potential user know what is available. We tried many different things, meetings with superintendents, meetings with district administrators, meetings with faculties but none of these seem to be as valuable as just being visible and accessible. Most educators are not, at this point in time, used to having anyone give reliable, indepth help with their problems. Because of the present nature of the service through SEDC, the educators have looked to the Center for aid. The use of research information is new to 95% of our teachers and will require a lot of exposure to successful experiences before it becomes a natural reaction to use available sources before making a decision.

2. Follow activities of the agent.

After a client has received information back on a request, we, the agents, usually allow one to two weeks or more, depending upon the nature and reason for the request, before checking back to see if there is more or additional aid needed. In some cases this is done by telephone, others by personal contact. This, again, is dependent upon the person making the request, and the nature of the request.

If the person is in a key position in a district, this may or may not be a formal position, the agent may want to give this person additional follow-up service in hopes of having this person stimulate others to use research information.

3. Ways of evaluating your work.

Probably the most effective way we have of evaluating our own work is the number of times we are asked to assist with problems by any one particular client. If we have been effective or successful in helping with one problem we become more involved with helping to find solutions to others, either by the original client or other members of the faculty.

We also have found it very beneficial to have two agents working together and sharing ideas and methods on various cases. In this way, we not only have the benefits of self evaluation but can utilize constructive criticism of each other, by each other on a day to day basis.

4. Work load in relation to building the relationship or work priorities.

See answer #2

5. Levels of access---or who you serve most and why.

I don't feel that we serve any one group more than another. The client's position is not the governing point, but it is found that the formal leadership role in some schools is held by the administrator, in others the informal leadership role is the more powerful. I feel that this leadership function is the most important determinant in why some work at one level and some at another. Their judgement as to where they can be of most good and the inquiries for information are the reasons for serving those we do.

6. Cooperation within intermediate organization (the Regional Center)

This has been the basic foundation of the Southwest Educational Development Center since its inception in 1966. We as field agents are doing our upmost to encourage innovative educators to develop their programs with the help of technical assistance (if appropriate) and then share their knowledge and experience with others in similar situations. We feel that education will not truly change for the better in isolation and that an important part of our job as field agents is to help our clients benefit from the experience and successes of others.

7. Information needs or whatever - retrieval systems.

From the experience of th past two years, we feel that the need for information that is straight forward, not couched in jargon and fifty dollar words, that gives the "how to's" and the "what we did's" are what is needed to meet 85% of the requests. It is important to have a well-designed, statistically sound, well-documented study, but for the most part, educators whom we have worked with to date are not looking for this type of information in their initial request. What they want is more on the order of the Boulder Pet Packets. The agent must always make some judgements as to how much of the Pet Packet or any other type of information the client will use. Too little may give the appearance of little effort. Too much may "over kill" and the client will not even attempt to go through the information. What is just right for each client, of what type of information, written at what level? These are questions every agent resolves within his own mind for each client if he is to be successful.

1. Establishing Contact with Clients - Building the Relationship. Trust is developed over a period of time. There seem to be few, if any, shortcuts to achieve this very vital component of lasting change.

2. Follow-up Activities of the Agent - Our Agents have attempted to serve too large of a geographical area and too many clients to provide meaningful follow-up service.

3. Ways of Evaluating Your Own Work - I think one must evaluate ones work in light of the actual and potential impact on the lives of children.

4. Work Load in Relation to Building the Relationship or Work Priorities. I think it should not be an either-or situation. I would recommend a smaller work load with fewer clients to bring about more lasting change.

5. Levels of Access - Or Who You Serve Most and Why - Unless top management subscribes to and supports meaningful change it will always be difficult to effect. The learning climate is pretty well determined by policy makers. I feel that the access can be gained at any level, but that all levels must be involved in and give support to change decisions.

6. Cooperation within Intermediate Organization - "The amount of good that can be accomplished is multiplied many times if you don't care who gets the credit." Cooperation is a very important KEY.

7. Information Needs or Whatever - Retrieval Systems _ Philosophically I am torn. Being able to draw upon the full body of knowledge in a short period of time is valuable. But the key is the human element and the need for and the desire to change or improve. Sometimes quick information to solve a perceived need is provided and careful follow-up neglected. In these instances the most basic and underlying causes of the difficulty are ignored.

SUMMARY

As has been written in many discussions the agent, while working with his client's needs on a day to day basis, must keep an eye on the school district within which he works, its characteristics, the administrative personnel with which he works, and their idiosyncracies, whether the schools are authoritatively or humanistically oriented, size of school and district, district and school budget, the status of the client within the system, the distances between schools, and his limited amount of time. He needs files on his clients and the ability to recognize something that may be of interest to them, whether it bear out the client's educational philosophy or if it be a new alternative to an old problem. There should not be a competition between different types of information, i.e., research as opposed to personal assistance, in the Agent's mind, but rather a selection, a matter of alternatives to fit the request of the client. This mode of working can be communicated to the retrieval staff which will provide the personal type of back up that the effective field agent requires.

APPENDIX

THE LINDEMAN REPORT

The Reference Center is a service function and one that supplies to clients, information retrieval facilities to obtain the information that is needed for decision making and program implementation.

To meet the varied needs of educators it is necessary for the Reference Center to be able to produce a variety of types of information. Therefore, when we say we provide "information", we use the word in a very broad sense: Resources that have been developed are:

ERIC - our most used resource.
Local innovative programs.
Media.
Reference materials from other libraries - state, public, university.
Lab programs
Consultant information.
Agency publications and magazine availability information.

Information retrieval has through the years been a function of the Library Services. In this agency, as in others, Library Services are placed within the Media context. The Reference Center fits well with already set up library resources and acts as a linking center to provide whatever type of information is needed.

The Project does not do research per se, but disseminates the results of research both local and national, as one of the resources offered the clients.

An inportant point to remember is the great variety of resources that are necessary when one tries to fulfill individual needs. It is impossible to house these in one spot, and there is no need to duplicate these services, when a linking system is utilized.

As to the specific information in which we deal:

ERIC is our biggest resource.

ERIC is a national information system designed and supported by the U. S. Office of Education for providing ready access to results of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

Through ERIC publications and tapes any educator in the country has easy access to reports of innovative programs, conference proceedings, bibliographies, outstanding professional papers, curriculum-related materials, as well as reports of the most significant efforts in educational research and development, regardless of where they were first reported. Such items as:

> Annual reports, bibliographies, books, instructional programs, manuals, position papers, program descriptions, research reports, review speeches, and non-print materials.....are as large a part of ERIC as Research Reports.

ERIC Usage Report of specific descriptors denoting various types of information from ERIC DESCRIPTORS June 1972.

Annual Reports	308	Program Descriptions	1,619
Bibliographies	2,741	Research Projects	377
Books	232	Research Reviews	728
Instructional Programs	368	Research Utilization	233
Manuals	19	Research Proposals	98
		Speeches	93

As far as the local reference center requests are concerned:

At the present time, but not for long, four packets of information (CAT, CAP, PET, and Individual Searches) are received from the Colorado Retrieval Center.

The products of three of these are packages of abstracts from the ERIC system and the other a PET packet of xeroxed articles from educational magazines.

It would be difficult to differentiate the specific research materials in each of these packets, but I have taken a PET packet and listed the magazines from which articles were taken. This one was on Grouping:

Instructor
Elementary English
Clearinghouse (2)
Phi Delta Kappan (2)
Grade Teacher (2) - 1 Research Oriented
Exceptional Children (2)
  1 - Research Oriented
Education (3) - 1 Research Oriented
Colorado School Journal
Educational Leadership
Psychology in the Schools -
  1 Research Oriented
School and Society
A.V.Instructor
Journal of Educational
  Research - 2 Research oriented
Math Teacher Programs
Educational Technology
School Science and Math
Nation's Schools
P.T.A. Magazine
Childhood Education

Another packet - the CAT search, this one on Reading, included this type of documents:

Reading Guide
Eassy on Creative Teacher
Bibliography
Bibliography - Methods
Education U.S.A. Report
Position Paper
Phase Elective English -
  Experimental Program
Ideas for Teaching English -
  Gr. 7,8,9 - Successful Practices
Reading Conference Report
Guide Reading, Gr. 9-12
Teaching English & Reading Simultaneously - Study Guide
44 Reprints from Reading Teachers and
  Journal of Reading - Developing H.S.
  Readiness Program
Annotated Bibliography of a Research
  Team - Teaching English to the
  Culturally different
Course of Study - Reading
Curriculum Bulletin
Summary of Scientific Research &
  Professional Literature on
  Reading Interests of Secondary
  School Students 7-12,1889-1965
Ph.D.'s Dissertation on Effects
  of Indiv. Reading on H.S. Seniors
Bulletin
Instructional Bulletin
Development of Reading & English
  Materials, Gr. 7-9, Final Report
Atlanta Model
Guide - Novel in Secondary English
  Class
Innovative English Program Report
Individualized Reading in Literature
  Today - Description
Teaching Methods - Book Reports
Description of Semantics &
  Critical Reading

Description of developing critical reading power through newspaper reading	Developing the Mature Reader - Conference Report

Evaluation of the inductive and deductive group approaches to teaching selected word analysis generalizations to disabled readers in the 8th and 9th grades. - R. Wisconsin R & D.

The Individualized searches would tend to be the ones most specific as a rather close delineation of the request is asked for. It has been up to the agent to designate the types of searches desired from the client's discussion.

The number of searches of various types is listed below from the September Report:

TOTAL NUMBER OF ERIC SEARCHES FROM JULY 1, 1971 - JULY 1, 1972

CAP	CAT	PET	SID	TOTAL
171	542	400	451	1,564

Specific subject matter of requests may be seen on Report No. 25.

100 requests have been checked - 89 from October and 11 from November. Nine (9) could be designated as research requests as the word "research" appeared in the request.

Of the local requests we call them - meaning the type of thing needing individual attention by the reference center, these are 11 examples:

1. Administrative - Procedures of School Districts.
2. Data on vocational statistics - Thesis sent on this one.
3. Prep Kit No. 22 on Disadvantaged Testing.
4. Specific program information - Fountain Valley in-service program.
5. Live In "consultant" information.
6. Current awareness searches of recent journals - Career Education, Year-Round Schools and Middle Schools.
7. Lab Program materials -- Southwest Lab, Far West Lab.
8. Personnel reference requests
9. Agency publications search
10. Books from the State Library
11. Programs from local schools - Minicourses, for example

Others:

U-SAIL materials.
Specific science test for mentally retarded -- ERIC cannot handle this.

The rest (80) would be designated as packet searches, wanting programs, general interest information, teaching techniques, teaching methods, models, curriculum guides, tests, instructional materials and books, Media, and curriculum information.

When a client desires it, we try and correlate national and local information. For example, on a recent request on Middle Schools, we provided ERIC information and also local Middle School information, very helpfully provided from in-agency sources.

Findings:

Information Retrieval has historically been "reference-library" oriented.

> Generally our requests are not for specific research information. If any one thing does come from a report of this type, is the wide variety of information sources needed, and the need for commitment from the agency as a whole to assist with this type of information retrieval.
>
> We do not have an overwhelming majority for any one specific type of anything.
>
> Most teachers want curriculum information, "how to do it" in various subject areas. Administrators want planning, evaluating, scheduling, etc. We have some very fine researchers who do come to us when the need arises and they do ask for specific research information in a variety of fields. We attempt to provide for all.

The Technical Assistance Project has combined the personal element that is proving to be so very important in the form of the agent who takes the requests, and more importantly, follows through after the information is received to aid with implementation. The two components should not be thought of as distinct units, but complimentary, working for the betterment of education.

Another conclusion that cannot help but be drawn would be not to banter the word "research" around. As used in the context of the T.A.P. program, it has been used rather loosely to refer to all the types of information the Center and ERIC provide. It will assist us in future searching, to define exactly what the requester does need.

NIE PUBLICATIONS AND MATERIALS

1. Early Childhood - Collection of booklets and brochures.
2. Reading and Compensatory Education - Booklets and brochures.
3. Educational Products Display.
4. Educational Products Display Minikits.
5. ERIC USER NOTES - Newsletter.
6. New Publishers Alert Service (PAS)
7. PREP - New ordering procedures and making early editions available.
8. Targeted communications projects:
    (a) Targeted Communication: The Impact of the Nongraded Schools: Norman Bowers: Northwestern University
    (b) Information and Information Sources on Accountability as Related to Instructional Programs in Higher Education: Gerald E. Gage: Oregon State System of Higher Education
    (c) Teaching the Disadvantaged by Applying Observational Principals: Irwin G. Sarason: Human Interaction Research Institute
    (d) Informing the Public About Alternative Options for Financing Public Schools: Louis J. Rubin: Communications Coalition for Educational Change
    (e) The Use of Incentives to Enhance School Learning: Steven M. Jung: American Institutes for Research
    (f) Education for the Mildly Retarded Child: An Alternative Approach: Stanley H. L. Chow: Far West Laboratory for Educational Research and Development
    (g) New Approaches to College Student Development Programs Arthur L. Tollefson: Human Interaction Research Institute
    (h) Career Education for Disadvantaged Students David J. McCracken: Ohio State University
    (i) Successful Mechanisms for Urban School/Community Involvement: Dale Mann: Teachers College, Columbia University
    (j) Open Education: Translating English Primary School Experience into American Classroom Practice: Stanford J. Glovinsky: Far West Laboratory for Educational Research and Development
9. Bibliographies
10. P.E.P. - Promising Educational Practices Project - To describe promising educational practices and programs K-12 developed at state and local levels.

11. Various studies that have been conducted for the Dissemination Unit and that have provided a rich background of usable information for retrieval centers to use in prioritizing their commitments for materials and requesters. The microfiche documents reporting these studies are appearing in ERIC and have been cited in this report.

12. Task Force Emphasis on a Uniform Reporting System for Projects.

Questions & Answers about IDI

NATIONAL SPECIAL MEDIA INSTITUTES

The questions and answers that follow explain a number of features of the Instructional Development Institutes program (IDI). This program has been developed by the National Special Media Institutes (NSMI) Consortium under a contract with the U.S. Office of Education, National Center for Educational Technology.

1. *What is an Instructional Development Institute?*

   An Instructional Development Institute (IDI) is a 40 hour training program designed to provide initial skills and competencies in applying instructional systems principles to learning and teaching problems in a local school or school district. Instructional Development may be simply defined as a systematic way of analyzing curriculum and instructional problems and of developing validated, practical solutions.

2. *What is its purpose?*

   The purpose of the IDI program is to assist school systems with limited resources, substantial numbers of academically or culturally deprived students, and a real desire to find innovative and effective solutions to consequent learning and instructional problems.

3. *What benefits may a school system expect from participation in an IDI?*

   There are several. First and most valuable, of course, is the core of key personnel who will be trained in applying the Instructional Development process to local school or school district problems. This benefit can be extensive and far reaching—*how* beneficial will depend on how the school district makes use of its newly trained manpower after the Institute is over.

   Secondly, professional consultation will be available, if desired, from the agency conducting the Institute to help assure continued progress and the long-term gains of which the Instructional Development process is inherently capable.

   Thirdly, certain of the training materials will be left with the trainees for continued reference and use. A complete set of the Institute training materials will be made available to IDI trained districts desiring to purchase them in order to train additional personnel.

Fourthly, the ultimate payoff, of course, will be with the learners in the classroom. By the close of the Institute, each participant team will have developed feasible plans for attacking a specific instructional problem in their own school or school district. Continued work on these plans will enable the schools more readily to achieve validated practical answers to many of their critical instructional problems.

4. *Who developed the IDI?*

The Instructional Development Institute program was developed by a consortium of four higher institutions having strong programs of Instructional Development and Technology. These institutions are Michigan State University, Syracuse University, the United States International University, and the University of Southern California.

5. *How has the IDI program been validated?*

Each of the units or modules in the 40 hour program has been field tested and revised several times and the entire Institute program was evaluated and revised in four Prototype Institutes conducted in major school systems during 1970-72 including Detroit, the Phoenix Indian Schools, Atlanta, and Minneapolis. Further evaluation and refinement was continued in 39 IDI's conducted during 1971-72.

6. *Who conducts the Institute?*

Twelve (12) teacher education agencies other than Consortium members were trained to conduct IDI's in their respective regions during 1971-72. These include the Bureau of Indian Affairs for Indian schools, California Teachers Association, Clarion State College, Detroit Public Schools, Georgia State University, Florida State University, Minnesota State Department of Education, New York State Teachers Association, Southern University, Virginia State College, the University of Toledo, and the Washington State Department of Education.

Ten of the above agencies trained two additional ID Multiplier agencies (IDM's) during 1971-72, and most of these IDM's are now available to conduct IDI's in their respective regions. In addition, 43 new agencies called Instructional Development Agencies (IDA's) were trained during 1972-73 to conduct IDI's in 28 states, including staffs from 16 Regional Education Service Centers in Texas. Thus, steadily increasing numbers of trained teams are available to conduct Institutes for local school districts. The team training received consists of four steps: (a) attending an IDI as a participant; (b) attending a special three-day workshop for Institute Directors; (c) assisting in the conduct of an IDI chaired by an experienced Director; and (d) directing an IDI in their own state/or region with an experienced Institute Director present to assist as needed.

7. *What does an IDI cost the school district?*

Overall costs for conducting a five-day IDI is $4,625* which pays for staff time, staff travel and per diem, all materials required and shipping costs. In addition, the district must release participating personnel for the 40 hours required; provide necessary spaces (one large group and five small group spaces in which exterior light can be controlled); and equipment for operation of the Institute. Equipment required consists of several Carousel slide projectors, and 16mm. projectors, an overhead projector, large screens, and a stereo tape recorder—equipment available in many school systems. It must, however, be in good condition. The district will also be expected to supply an experienced and capable projectionist, as well as a modest amount of secretarial and duplicating assistance.

(*This cost is sometimes met by USOE grants to local districts.)

8. *Who should attend?*

Crucial to the effectiveness of the IDI is the school system's and the participants' interest and desire to participate. The nature of the team effort involved indicates that maximum benefits will be derived by selecting participants who are opinion leaders among their professional colleagues. With such personnel, the impact of the Institute is most likely to be of lasting and far reaching value.

Due to the need for an effective "mix" for impact and follow-up within the school system, a representative selection of participants should be made approximately as follows:

30-35 teachers (at least two or three from each school represented)

4-5 administrators:
  2-3 at the district level—superintendents or assistant superintendents
  2-3 principals or assistant principals

2-3 school board members (highly desirable at the opening and closing sessions of the Institute)

4-6 specialists in curriculum, instruction, content areas, media, etc.

A group of 50 has proved to be a good size for an effective Institute; more participants can be accommodated if arrangements are made sufficiently in advance.

9. *Why this mix?*

For two reasons: (1) Resolving instructional problems today requires understanding and cooperative team effort at all levels of the school system. This cannot normally be achieved effectively by any single group or level of education personnel. (2) Good interpersonal relationships within the teams set up at the Institute can do much to get them started right on a continuing development program for the schools when the Institute is over.

10. *What kinds of learning experiences and materials are provided for the participants?*

A variety of learning experiences are provided each of which has been tested and revised several times so as to achieve optimum impact for carefully specified objectives. There are some large group and many small group activities including discussions, simulations, and games supported by a variety of films, slide-tape presentations and individual exercises. The complete package includes some 16 cubic feet of printed and visualized materials for a group of 50 participants. These materials have been developed, tested and refined over a 3 year period. They include original reference materials which are left with the school district for follow-up use after the Institute is completed. Each participant gets to keep most of the materials which are distributed for his use during the Institute.

11. On what kind of time schedule is the Institute offered?

While other arrangements may be possible in some instances, experience indicates that a concentrated five-day period is the most desirable and effective period for conducting the Institute. It is an intensive and demanding learning experience which should not be attempted with participants who are also attempting to carry on other work responsibilities during the period of the Institute.

12. What schools or school districts are eligible for an IDI?

Any districts are eligible which have limited resources, large numbers of academically and/or culturally deprived students, and a genuine desire to do something about it. In addition, the school or district must be willing and able to release the participants from their normal duties during the period of the Institute and to provide the facilities, equipment and other services noted in question #7.

13. Can the 40 hour time period be shortened?

No. It is a 40 hour training package which has been tested and validated on that basis. Omission or abbreviation of any of the units in the package will reduce or destroy the effectiveness of the learning experience. Continued efforts are being made to find ways of reducing the total time required, but these must be tested and validated before they can be safely implemented.

14. MISCELLANEOUS ITEMS

Are part-time participants permissible?

As observers only. For the reasons above, very little benefit can be expected from partial participation.

Can districts be combined for purposes of an Institute?

So long as the eligibility requirements above are met and a proper mix of participants is provided, there is no reason why districts should not combine for an Institute.

Where can I get further information?

Consult the IDM or IDA representative from your region:

Or address an inquiry to one of the following:

Dr. Charles F. Schuller, Director NSMI
Instructional Media Center
Michigan State University
East Lansing, Michigan 48823

Dr. Donald Ely, Director
Center for the Study of Information
and Education
123 College Place
Syracuse University
Syracuse, New York 13210

Dr. Jack Edling, Vice President
United States International University
8655 Pomerado Road
San Diego, California 92124

Dr. William Allen, Chairman
Department of Instructional Technology
University of Southern California
Los Angeles, California 90007

TECHNICAL ASSISTANCE

The Educational Extension Agents

By Jerald Hawley and David Church

The roll of an extension agent (EEA), field agent or technical assistance agent vary depending upon the person and the location in which he works.

Here in Southern Utah, two agents have been working for two years. The area covered is 25,000 square miles of sparsely populated rural country. The agents are based at the Southwest Educational Development Center (cooperation resource center serving six independent school districts).

To make the EEA concept functional it was decided by the agents that it would be better for one to work the elementary schools and the other the secondary. Mr. David Church, because of his background as an elementary teacher and principal, took the elementaries and Mr. Jerald Hawley took the secondary.

The first phases of the program were slow in taking hold, but after much work and some frustration the concept of helping the teachers and administrators with their problems began to materialize.

The role of an EEA is very time consuming, but the results seem to be rewarding. At the schools, regular contacts are made and technical assistance requests for research information are taken and delivered. In addition to this information gathering service, there is a great deal of personal interaction involved between the client and the EEA. Ideas are tested and shared, opinions are sought and recommendations given concerning many and various aspects of education including physical facilities, classified personnel, cirriculum improvement, scheduling, etc.

This type of function requires at least a certain degree of competancy in the broad spectrum of education. If the client has personal regard and confidence in the EEA, change and improvement in educational practices have a much better chance of occuring with the use of technical assistance information as opposed to the more impersonal collector and disseminator of information role.

Time is spent with specialists, consultants, and sales representatives; attending workshops, reading and evaluating various commercial educational materials. This enables the agent to be somewhat knowledgable in the latest program developments and thereby increases his effectiveness as a resource agent. Principals seem to be much more receptive to ideas and information provided by the Southwest Educational Development Center (SEDC) now than at this same time one year ago. It has been found that many requests can now be filled locally or by state department specialists and this has contributed greatly to the mutual respect relationship that now is enjoyed with most of the schools in the SEDC service area.

In some of the schools, the agents are encouraged to be available if problems or needs arise but have not been asked to come in on any specific problem as yet. The EEA's have been ordering informational packets which they feel will be of interest to the personnel at these schools and delivering them in the hope of triggering some initiative on their part to involve us in helping to find solutions to their problems.

This has been somewhat successful in that additional requests are now being received; but, in many cases, there still need to be more time and possibly a change in operation to be of more assistance to them.

A typical request is one which we received from Panguitch Elementary School. The principal asked the EEA to help him and his staff to review their curriculum program. He indicated that for about two years they had been trying to evaluate and revise programs but always seemed to get bogged down.

The EEA proceeded to request informational packets applicable to this area of concern, contacted state specialists and pulled together information and ideas obtained through our past experiences. A meeting was held the first part of January in which we outlined procedures, provided state curriculum guides and other informational helps. The EEA and the principal re-evaluated the present status of the progress made by the faculty to that point and planned their strategy for the remainder of the year. It was decided that a progress meeting be held every two weeks at which time a new phase of the curriculum would be looked at and a new assignment given for the following two weeks.

The resource agent will be on call any time during the interum if problems arise, and specialists and other resource people would be called in when necessary.

Two areas of the curriculum have been completed, and it appears that the entire project will be completed by the end of this year.

At Cedar City High School, assistant principal James Miller, also a social studies instructor could see that the students in his class as well as in other areas of the school were not able to evaluate their own progress realisticly. This troubled him. He talked to the principal and other faculty members who all felt the problem much the same as he did. The principal suggested that he get in touch with the EEA at SEDC, which he did.

Mr. Miller and the EEA spent two hours talking over the problem and trying to identify the different elements that made up the problem. The EEA returned to the office and did some research on the problem to get himself more informed as to how to attack the problem. He then requested information from the state research and retrival center. Mr. Miller was also very active in working with the problem. He called the EEA one morning and said he had heard that there was some information at one of the state universities that related to the problem. The EEA telephoned the state retrival center and asked if they could locate the information Mr. Miller had cited. It took some time, but the document was located and Mr. Miller received a copy. Much other information was gathered through ERIC and given to Mr. Miller. The agent and Mr. Miller spent more time together going over information and trying ideas out on each other. It was suggested that Mr. Miller try some critical thinking exercises using video tape as a monitor and have the students evaluate their own performance. The idea seemed good and was tried. Modifications were made and the program was tried again. More information was found which influenced the project and other changes were made. Mr. Miller is still working on it, but it is much further along now because of the time spent by the EEA in providing a service he could not have done by himself.

The time required to look up the alternate solutions even if the resources were known would have been too much. The educator in the school has more demands than time to meet them.

The EEA concept provides an answer to the age old problem "where do I get time to find better ways of helping children learn". This problem has plagued educators for ages. Now there is at least one possible solution, the Educational Extension Agent!

CASE STUDIES

Case Study

NOTE: I have never written a case study of this type and feel that I have barged in where I should not have, however, I will record the events as they transpired. Ray Whittaker, hopefully, has added a great deal of input and revision to this, since he knows the Center orientation of this. This may not follow the exact case study format, but it was a wonderfully interesting experience to Ruth and myself and the others involved and one that showed progress and pointed up areas of concern. . .

This is a successful case study and a learning experience. The clients involved are Elementary administrators--principals in several schools--a teacher or two and extends to a Superintendent and the SEA.

Ruth Nielsen began her field agent career with a great deal of background in the area. She has taught in the area for quite a few years and is the wife of the North Sevier High School principal. Ruth did not feel comfortable with the Boulder materials, and was very apprehensive about following in Voyle Munson's shoes. Having lived through this type of experience already, I encouraged her to do just exactly what felt comfortable to her. She soon had devised her own ways of meeting clients and being of service to them in a personal and friendly way. She visited and provided items of interest from her own files and her personal expertise in subject areas. Ruth was very grateful to Ray Whittaker as he was a source of encouragement to her. A humanistic individual is a great help in a new situation.

INITIATION

Ruth's first real involvement came after about three months of visiting and familiarization with the Technical Assistance Project. As she visited she noted that several schools had similar problems in Math; some wanted new programs, others new textbooks. She decided to ask Don Clark the SEA Math Specialist to come to the area and visit the schools. She set up an agenda, with questions to be discussed, names of individuals and times to meet. (A copy of the original is enclosed--please excuse the personal notes). It might be noted here that Don Clark is one of the most human of educators. This project is successful partly because of Don's philosophy of teacher involvement and his role as a helper, rather than "teller." He is new to the SEA and has a clear perspective of the humanistic role of a Specialist. I was invited to go along.

My purpose in going along was to find out exactly how the information retrieval fit into the actual working situation, and if being on the spot was an advantageous step for the retrieval staff. I decided it was. I passed out brochures rather quietly, talked a bit about the service, but my main role seemed to be as an observer and I attempted to let the people know that getting information was really a friendly business and very accessible to them at any time.

MEETING 1

North Sevier High School was the first stop and is the school where Ruth's husband is principal. The principal, four or five math teachers; an old timer, a traditionalist, and a coach who would be teaching math and a counselor were in attendance. Don was introduced and made it quite clear in a tactful way that he was not there to give answers and he made some suggestions as to programs and put in a commercial for the activity oriented math program and most of all was friendly and let the people really feel that he was with them and wanted to help, yet one felt he knew his business thoroughly. After the meeting several came to him on a more personal basis and discussed ideas. Later I sent some journal notes etc. to some of the teachers, from which there has been no response.

MEETING 2

Salina Elementary We met Mike Robinson for the first time and Don was just as friendly. Ruth explained in Mike's presence to Don, what Mike's concerns were. She generally filled us in on personalities before we went into a situation so we had some guidelines to follow. To my knowledge Don has been back several times to visit with Mike and worked on his textbook problems. From Mr. Robinson came four ERIC requests.

MEETING 3

From there we went to Wayne High School. This seemed a rather stultifying meeting between the principal, the math teacher and us. There wasn't much that could be said, and one had the feeling little change would take place as the math teacher was very uptight. The principal, however, has used the ERIC services.

MEETING 4

Bicknell This meeting at Bicknell was successful. The rapport was good. I heard several complaints from the principal about the microfiche readers and the "fiche." Due to this we have had all of our readers completely repaired and his comments on the outdated "fiche documents" gave me more ideas on the service. This was an all around interesting discussion between two principals and about four or five teachers. Don spent time after going over various math details, and ERIC searches resulted.

MEETING 5

This meeting at Ashman Elementary ties in with the one at Bicknell in several ways. We had discussed Middle Schools since both Bicknell and Loa were trying to get into this area. Carl Tuft, the principal and Don got along very well. Carl wanted to visit some individualized Math programs and Don suggested he visit Kaysville Middle School, where Ella Hoskins and Don Crookston have an interesting program going. Luckily, I had flyers along on the Math program. On my return to Salt Lake I made immediate arrangements to visit Kaysville. Ruth and Carl and some other teachers picked me up and we visited the school. I had told Don of this and he dropped in and made further arrangements with Carl Tuft. (See attached resume of the visit)

In the meantime the Bicknell and Loa schools and the superintendent were still thinking of Middle Schools. Ruth mentioned this and the fact that they did not know exactly what to do next, and would I find out. I checked with the Secondary Specialist who was encouraging and outlined the procedural steps to be taken. These were written up and copies of the Middle School evaluations were sent to those interested. We sent off several searches on Middle Schools as well as doing an instant literature search for current articles and sent several books. We were planning another visit to Kaysville to observe the Middle School when school let out for the summer. Names of pilot Middle Schools were given to the Superintendent so that communication could take place.

LATER

An interesting side light on this is that during the last SEA staff meeting, the Middle School subject came up, mentioning the area we had been working in, and that the agency should prepare a policy or position paper on Middle Schools.

During our monthly meetings Ruth discussed some of the things she was doing, with the Middle Schools. The project coordinator wondered if we should be spreading "gimmicks" or solutions. Ruth has been, as our other agents, very concerned with the "problem diagnosis" idea. Most of us feel this concern, yet feel that in building the relationship we get what information the requester wants--filling the users needs. On the materials sent to the Superintendent I attached a note, about alternatives and stimulation thinking in an attempt to give a bit of leeway.

PROBLEMS

At one point it looked as if the Superintendent would not allow the visitations. I asked the Coordinator if there were other ways to get this information to the people and he said no, as taking people to the district still had to have the superintendent's ok. I was looking for alternate ways in case this would be a stumbling block in the future. As it turned out the Superintendent was very responsive and enthusiastic for which we were all grateful.

I tried to summarize the effects of these visits at the time. About 20 ERIC searches, four or five literature searches, several visitations. The most enjoyable result was the rapport between individuals visiting and what each person seemed to get out of the contact between agent, specialist, and educators was fruitful, and all our services seemed more vital and satisfying. If there could be a way for the Technical Assistance Project to sponsor more personal visits, perhaps not in all cases, but when the time was right, we would be doing an invaluable service to education in this state.

REFERENCE CENTER FOLLOW UP OF SEVERAL REQUESTS

TV request packet from Media Division on newest programming. 5/19/71

Consolidation discussed - several items have been sent

ERIC searches resulting ----
1048, 7073, 7072, 1052,
7054, 1951, 1049, 7075,
1044, 7076, 7078, 7077.

4 - Millword Robinson Math
  6559, 6560, 7037, 7038
2 - Hallows - Grouping & Individual Instruction
  7039, 7040
1 - Classroom Facilities - Newby
  7047
1 - Middle Schools -
  7079
2 - Counseling

Notes on references to Ipsom-Counseling
Counselor
Mrs. Bennett on recorders

Carl Tuft:
Reading materials U-SAIL - workbooks
List coming from U-SAIL - Textbook checklist
List coming from Special Ed.

Boyd Keisle follow up while at U-SAIL
on learning banks

Possibility of problems -- Ruth foresaw a problem with superintendent which did not materialize...

REQUESTER NAME William Dudley TITLE Principal, Wasatch Jr. High

TOPIC Middle Schools

RETRIEVAL ACTION ERIC Searches: Sids#'s 56, #58, #90, #91 and #92 on Middle Schools #92, #93, and #95 on Middle School Social Studies, #94 on Middle School Physical Ed., 89 Cat 14004 PE Elementary - Cat 47006

AGENT ACTIVITIES "The Middle School" issue of the National Elementary School Principal, November, 1971 was ordered and reviewed. Members of the committee asked for current research on the Middle Schools Concept. This the agent provided through ERIC for each of the teachers. In accordance they selected 50 articles to be reviewed. Also 8 middle schools were identified outside the state of Utah and their addresses given so that correspondence might be carried on between the committee and some*

RESULTING ACTION The study was completed and reviewed by the School Board. A Bond election was defeated so the Middle School Project has been tabled until further financial sources become available.

*schools. Middle School Projects within the state were identified and reports were obtained from other local districts. These reports were reviewed and the committee selected the middle school program at Nephi as a place to visit. The visitation was completed.

REQUESTER NAME Ken McClelland TITLE Head Start Director

TOPIC Early Childhood Language Workshops

RETRIEVAL ACTION Cat 29005 Lang. Arts ECE; Cat 51006 Teach, Techn, ECE; Cat 42003 Rewards Reinforcements: Cat 14017 Academic Skills ECE: Cat 11016 Preschool Math Sid Reading Sid - Evaluation Engleman Program: Sid Distor Eval: Cat 08001*

AGENT ACTIVITIES Provided Microfiche - Mr. McClelland leased a reader. Reference Center provided local current awareness bibliographies for a workshop reading list.

RESULTING ACTION Workshops were held and kindergarten curriculum developed.

*Communication Curriculum: Sid ECE Creativity CIJE.

REQUESTER NAME Sandra Noall, Lynn Jensen
Jed Wasden

TITLE State Specialists for Voc. Ed.
and Career Ed. Workshops

TOPIC Health occupations: Career Education and Vocational Education respectively.

RETRIEVAL ACTION (1) All ERIC Materials relating to performanced based teaching and health occupations (2) Packets on Career Education and Vocational Ed.

AGENT ACTIVITIES Reference Center Manager selected and ordered materials. Did local current awareness searches in RIE and CIJE and supplied microfiche and hard copied materials.

RESULTING ACTION 1. Health Occupations Specialist - materials given out at workshops. 2. Voc. Ed. Specialist - Speech at Career Ed. Conference. 3. Career Education Specialist prepared a library and bibliography of Career Education materials for distribution from SEA.

Carl Tuft Principal, Ashman Elementary

Mathematics

1971 - Approximately 10 ERIC searches resulted from this experience--for the teachers and principals involved. Math packets in Elementary & Secondary as well as individualized and physical facilities for math teaching. CAT 11018 Math -*

Ruth Nielsen prepared an agenda from 4 or 5 schools in her area, with varying problems in Mathematics. State Math Specialist and Reference Center Manager visited in the area for two days, visiting teachers, principals, faculties and curriculum specialists. Individual visits to Middle School math programs. The Math Specialist carried on through the summer with in-service math meetings for the Ashman faculty.

1. Ashman Elementary math program being modified; teacher in-service went on through the summer. A current report of Math Specialist states: "A program in the Individualization for Intermediate Mathematics at the Ashman Elementary School in Richfield, provides laboratory math experiences, self directed activities, continuous evaluation, and fluid grouping according to objective deficiencies." 2. Millard Robinson, Principal, Salina Elementary School--Math in-service program on going planned and carried out visitations to a Middle School where principals shared math information as well as had insights into the Middle School situation, which was helpful in setting up a middle school in the agent's area.

*Teaching Techniques, CAT 11017 Math, CAT 11019 Modern Math--March 1972-Search #'s 72-0439, 72-0430, 72-0441, 72-0444, 72-0445, 72-0446, 72-0447, are requests that record the activities of the State Math Specialist to the agent's area as follow up of activities begun during the initial 1971 contact.

REQUESTER NAME Lorenzo Hallows TITLE Principal, Bicknell Elem. School

TOPIC Middle Schools

RETRIEVAL ACTION 1971 (1) SID, Middle Schools, (2) CAT Middle Schools 47006 (3) Evaluations of Utah's Middle Schools obtained through Reference Center, (4) Several books provided on Middle Schools. (5) Reference Center conducted local current*

AGENT ACTIVITIES Ruth Nielsen, agent provided the research information to the principals and superintendents involved and provided requesting permission policies to start a Middle School, so that the educators knew state agency procedures to follow. Discussed the abstracts with the principals, and provided follow up when various new ideas came up. Reference Center made arrangements to visit Middle School (Kaysville). Visits were made.

RESULTING ACTION Middle School beginning to function at Bicknell-Wayne County, Utah.

*awareness (Prior to 3 months) 1972 Searches have come in throughout the two years from Mr. Hallows. There were 9 in 1971 and the most recent are March 1972, 72-0381 Middle Schools Curriculum Development and Teaching programs. 72-0382 Teaching Techniques and Individualized Instruction 72-0383 and Curriculum Planning and Development CAP.

A side issue being worked on for Mr. Hallows: Ruth Nielsen and the Reference Center is attempting to develop an "Ethnic live in" for this school. A book was provided in MF form (720375) "Ethnic Live In" for Mr. Hallows and the NAACP has been contacted for approval.

REQUESTER NAME Boyd Keisel TITLE Principal, Richfield Jr. High

TOPIC Math, Reading Science, Indian Students Sid-Math Jr. High Sid Reading Jr. High

RETRIEVAL ACTION Cat 38007-American Indians Sid-American Indians Motivation. 1972 Sid-Manners and Behavior Cat 42002 Personality Cap 28001 Student Teacher Relationship. #72-0074 Cat 42002 Guidance Behavior.

AGENT ACTIVITIES The agent (Ruth Nielsen) supplied information and coordination with State Agency to allow the principal to write the comments below as the resulting action:

"In mathematics seventh graders may find themselves involved in a teacher controlled flexible schedule program, or they may be in the Stretchers and Shrinkers program developed by the University of Illinois Committee on School Mathematics. *

RESULTING ACTION

* Eighth graders may be in a program for low achieving students or they may find themselves preparing for Advance Placement and college credit. Ninth grade students are placed in general math, pre-algebra, depending upon their abilities.

Perhaps one of the most exciting efforts to improve the school's offering to its students is the reading program, now a year old but still in a highly experimental stage, which has involved the entire staff. The program seeks to serve children reading at all levels. At present, students in the program may be found reading anywhere from a second to twelfth grade level. The entire program revolved around common content themes and makes extensive use of a variety of teaching-learning media.

A Utah History program that places the stress upon doing. This is in conjunction with the UTAH State Historical Society materials being disseminated through the TAP Project."

(1) 1972 Request - 72-0352 Pet Environmental Education

72-0335 Cat 1101 Outdoor Education

72-0333 Cat 11008 Biology and Physical Science

72-0334 Cat 11010 Science Programs

(2) Reference Center located Utah Innovation Earth Science Programs. Latest project involved looking at the Junior High Science Programs. State Science Specialists visited with Mr. Keisel and gave directions for next years science curriculum which is veering now towards earth science and environmental education than the conventional science program originally intended.

REQUESTER NAME John Besendorfer TITLE Teacher

TOPIC Reading

RETRIEVAL ACTION #162 - Cat 44008 Reading-phonetic approach #163 - Cat 33002 Sequential Reading-Elementary #164 - Cat 44006 Reading Individual Elementary #165 - Cat 44007 Supplementary Reading-Elementary

AGENT ACTIVITIES Committee was formed to evaluate Reading Programs for possible required research and alternatives for reading for district. Steps that have been taken for the committee's review are as follows: (1) N.C.E.C. Materials - Reading Model Schools Program presented. (2) Far West Lab Alert Materials for curriculum decision makers. (3) ERIC Information from Boulder Colorado BOCS. (4) Recommendation that the committee allow time for presentation of State Specialist Joanne Gilles on Criterion*

RESULTING ACTION Materials were evaluated and technical assistance was arranged through agent Norm Kohler who located a State Special Education Specialist and made arrangements for her to meet with the committee and give comparisons of the Criterion Reading Program, Sullivan and Random House programs. The specialist was well qualified and the follow up revealed satisfaction with the authoritativeness of her presentation.

*Reading Program.

CHAPTER V

PROJECT EFFECTIVENESS

Accomplishments Summary

APPENDIX:

Eric Tape Users Information

Personal Statements

Position Paper

Statistics

PROJECT EFFECTIVENESS

The Pilot State Dissemination Project was originally conceived to include three states in a pilot effort in dissemination with an outside agency responsible for taining and a second outside agency responsible for evaluation.

The Bureau of Applied Social Research, Columbia University, was awarded the evaluation contract with Dr. Sam D. Sieber as Project Director. His assistants were: Loya Metzger and Karen Seashore Louis.

The evaluation team has prepared many documents which have been most helpful to us as formative evaluation. These documents include:

1. Goals of Field Agents -- Sieber
2. Activities of Field Agents -- Sieber
3. Field Agent Roles in Education I -- Louis
4. Field Agent Roles in Education II -- Louis
5. Field Agent Roles in Education III -- Louis
6. Goals of the Project Directors -- Louis
7. Problems in Information Retrieval -- Metzger

The documents are available to readers and will not be quoted in this proposal.

Because an outside agency conducted the evaluation and because we knew that the data would be available to us, we did not gather formal evaluation data.

It is difficult to show a cause and effect relationship between the services of the Technical Assistance Project and some things happening in the schools. We know we have had a good influence. We are cognizant that other forces which bring about educational improvement are also wielding influence for good. Some results are immediate, others are long range. Changes in traditional social settings such as the public school are often painfully slow. Some successes can only be felt intuitively.

There are many types of evaluation and many areas to evaluate in a project of this type. Following this brief summary will be found the quantitative statistics that allude to the number and types of requests handled by the projects throughout the past 27 months. This must stand as a success landmark of some type from nothing to 2,634 requests answered.

The quality of the information materials has depended a great deal on the ERIC data base, this in some cases has been excellent, others fruitless. It is noteworthy that with each passing month, it has seemed that the efforts to improve ERIC and the Clearinghouse system have added immeasurably to the effectiveness of the materials a center of this type has to offer. There is still room for improvement, but such items as the (1) availability of documents in RIE, and (2) the listing of new descriptors in RIE, small items though they seem, assist immeasurably in the overall process. Hopefully the work Leasco is doing on revising the ERIC tapes and Thesaurus, as well as the newsletter and intercommunication facilities they are offering will be of great assistance to all centers. (See Appendix - ERIC Tape Users Information)

The case studies that have been collected throughout the last two years will have to stand as evaluation of the project and also a tribute to the cohesiveness of the Reference Center and the Field Agent staff.

Project effectiveness physically may be illustrated by the presence of the Reference Center, its growth in resources and its recent branching into local computerization, which without having proved its usefulness to some degree would not have come about.

The need for more microfiche readers though negative in the fact that we do not have enough of them, indicates the growth of the clients' acceptance of microfiche. For example, a large city district staff, who were contacted on a selective dissemination request, called and sought information on readers and have since procured some readers for the district office. The project has discouraged hard copy reproduction, but as procedures are solidified this policy may change. We did not have the time nor capabilities to go into this to a large extent in the past due to developmental phase of the project.

A few personal comments from users of the service have been included that indicate the usefulness of the service and also a few negative ones that indicate the areas in which the project must continue to refine its procedures. (See Appendix - Personal Statements)

The numbers of the clients within the target areas that have used the service again and again may stand as an effectiveness measure. In fact so much, that occassionally an agent will say they have not had time to expand to some other schools due to the indepth work in which they are involved with former or initial clients. Recommendations to others to use the service is another facet that illustrates usefulness. Many times a requester, usually within the SEA area will call and say that they had heard of the service, either through another administrator, a state specialist, or the University libraries. These are heartening to the project.

In a manner of speaking, the refunding for the third year of the project will stand as an evaluation that there have been some successes for the project.

ACCOMPLISHMENTS SUMMARY

General

A. The Reference Center is a reality.

B. PREP materials are being supplied to agents.

C. The ERIC Microfiche collection for 1968, 69, 70, 71, and 72 is being circulated heavily.

D. The project has six microfiche readers and a reader printer. The State Archives provide fiche to fiche reproduction service.

E. The four Regional Centers are stocked with ERIC indexes. The agents have the negotiation process operative and are moving quickly into many areas of implementation. The agents are being supplied with Clearinghouse and R & D Lab materials.

F. Half-time secretaries assist the agents.

G. A clientele of wonderful educators are using the services the Technical Assistance project has to offer. TAP reports indicate there are many "repeaters."

H. Each area is developing a cadre of local resource people in various sucject areas.

I. The Reference Center has processed 2,634 requests for information.

J. The following classes and numbers have used the TAP service:

Superintendents	101
Principals	403
Teachers	532
Specialists	796
Coord./Director	335
Miscellaneous	467

K. The agents are being very well accepted and becoming involved more "in-depth" in educator's programs.

L. Far West Lab Coordinator proceeding with the utilization of Minicourses and use of the new SEA - Far West Center, located in our building. There is close cooperation between the project and the Far West Lab.

M. Close coordination between Career Education, SEA Media Center and Special Education Media Center.

N. State Specialists are very cooperative in assisting with requests as well as sending in requests for information and passing along the word of the service, although no formal attempt was made this way. The attitude of the SEA has been a complimentary one toward the TAP Project, not only in utilizing the project services, but in other ways that give inportance to the project objectives. For instance: The Research and Development Division published a paper, Policies and Procedures Regarding Reporting and Dissemination of Research and Innovations Findings, which reads that "other research data from the R & D Division be coordinated with ERIC and Technical Assistance Programs and that the R & D findings storage and retrieval system be patterned after the ERIC system."

The report of the State Management Review Team of 1971 recommended that "Utah build the ERIC system as a basis for educator's decision making combined with technical assistance at the proper level", and "that this be done through the Pilot State Dissemination Program."* This is being accomplished in the target areas as well as in the SEA.

The philosophy and service role of the project has been included in statements in the ROLE, MISSION AND FUNCTION OF THE UTAH STATE EDUCATION AGENCY, just issued October 1972.

A position paper has recently been adopted by the Utah State Board of Education entitled "Putting Constructive Innovation Into Practice." (See Appendix - Position Paper)

O. A transparency presentation has been developed and each agent has a copy.

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* Report of the State Management Review Team of 1971, p. 39.

APPENDIX

UTAH STATE BOARD OF EDUCATION

Position Paper

Putting Constructive Innovation Into Practice

It is the position of the board that constructive innovation can be implemented and maintained in education only when long-range planning includes a systems view of the impact of the change and provides for the necessary adjustments in terms of the people, the resources and the relationships affected by the change.

As the tempo of change increases in society, educators are faced with the challenge of providing a learning environment which is relevant to the current and emerging needs of students. A concentrated effort has been exerted to respond to this challenge through the development of innovative approaches to education. For the purpose of this paper, a constructive innovation is defined as a new approach which results in a better solution to an identified problem. This definition rejects fads and frills which may represent change from former practice but do not prove through trial and evaluation to increase progress toward goals and objectives.

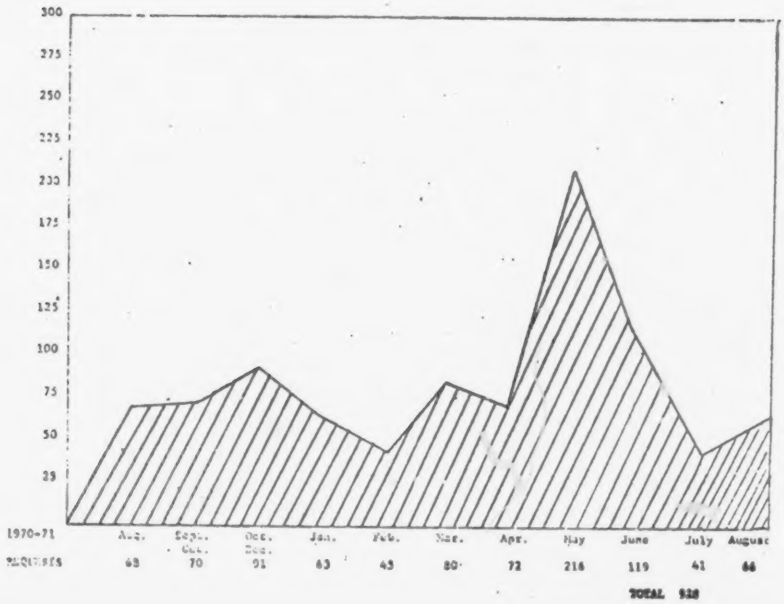
Many highly recommended innovations have been developed in the past decade. A review of the literature, however, will substantiate the fact that relatively few of them have become a part of the education system. If the premise that an innovation is a better solution to an identified problem can be accepted, it must also be accepted that no value can be gained from the innovative solution, regardless of its merits, unless it becomes an integral part of the system it was designed to serve.

The discrepancy between the development of constructive innovative programs and the implementation of these programs in the classroom can often be attributed to a failure to take into consideration the complex nature of the education system. The education system is made up of many components; the student, the classroom, the community, the central office, the state agency, and the school board. Within each component is a unique interaction of people, resources and relationships.

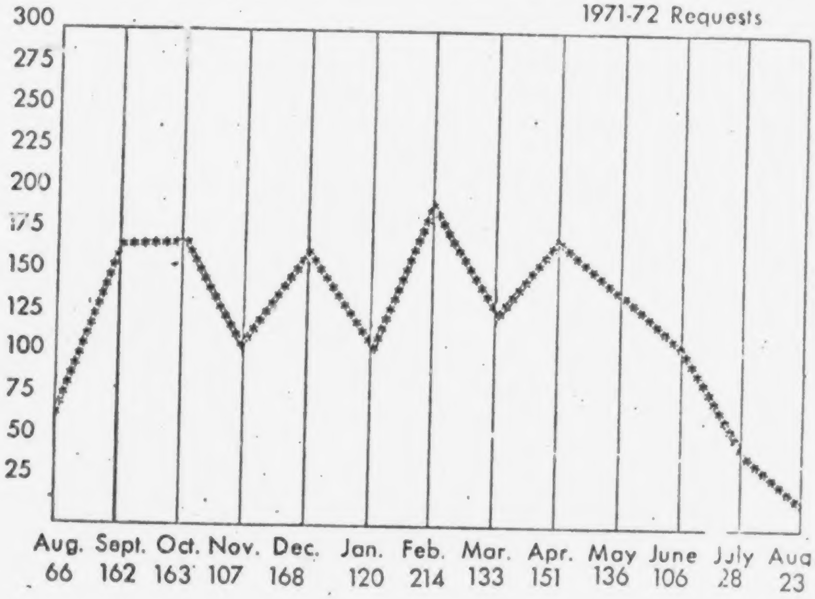
If change is to be successfully initiated and maintained in one of the components of the education system compatible changes must also be initiated in all components of the system affected by the change. Without a system-wide approach, the change is destined to be diluted by pressures from the components which were not compatibly altered. Strategies to effect change might include: (1) providing evidence which causes dissatisfaction with status quo to all components, i.e., needs assessment, diagnosis, evaluation; (2) providing evidence which supports the proposed change to all components, i.e., dissemination programs, demonstrations, actual experience, expert opinion; (3) providing adequate training for the professional staff; (4) providing adequate resources.

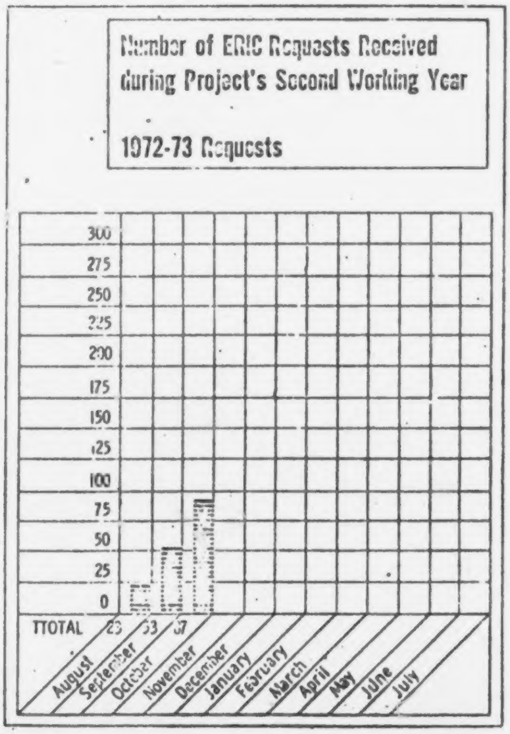
The degree of change that occurs is directly related to the degree to which all components are involved in the fact finding and diagnosing of the needed change and the formulating or selecting of solutions.

NUMBER OF ERIC REQUESTS RECEIVED DURING PROJECT'S FIRST WORKING YEAR



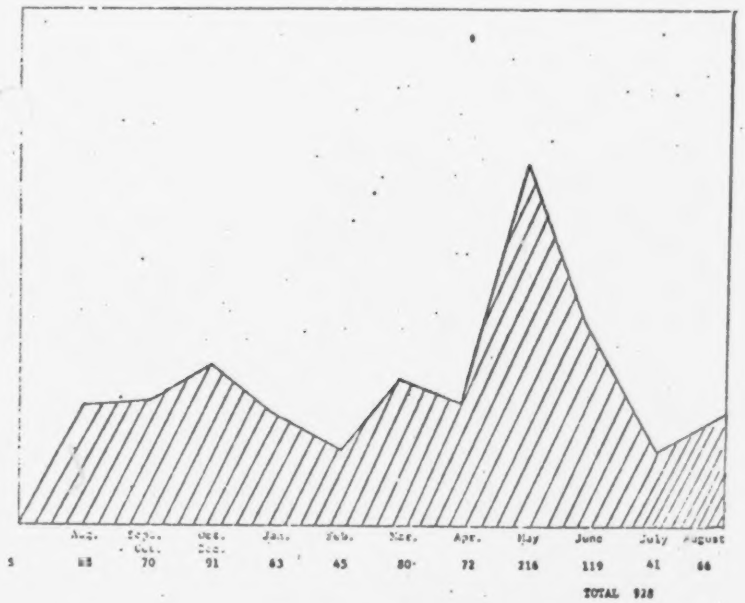
Number of ERIC Requests Received during Project's Second Working Year



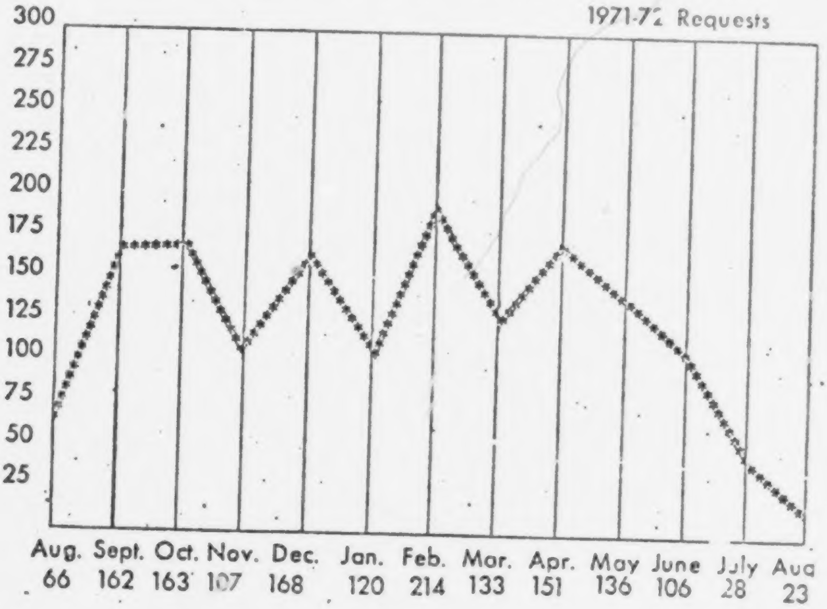

Number of ERIC Requests Received during Project's Second Working Year

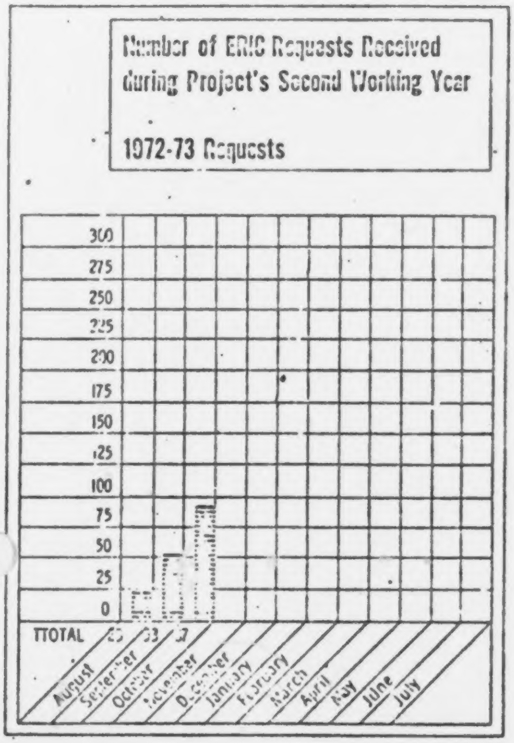
1972-73 Requests

NUMBER OF ERIC REQUESTS RECEIVED DURING PROJECT'S FIRST WORKING YEAR



Number of ERIC Requests Received during Project's Second Working Year




Number of ERIC Requests Received during Project's Second Working Year

1972-73 Requests

CHAPTER VI

FUTURE DIRECTIONS
  Procedures
  Final Word
APPENDIX:
  Addendum
  Survey Instrument
  Quarterly Report

FUTURE DIRECTIONS

This section will consist of the highlights of the original continuation proposal for the third year funding and the addendum that demonstrates the new areas in which the project is to move. The directions for this proposal have come from the needs developed during the first two years. (See Appendix , Addendum)

For example, some of the dissatisfactions stated earlier in this report relating to the Boulder products, as well as the need for a local service, have led to local computerized searching. The overload problem with the individual agents and the physical distances to cover, the large amount of information available, have led to the need to develop alternative ways to correlate the personal aspect of the project with the information retrieval by initiating the services of district agents.

The ultimate goal of the project is to move statewide and be able to offer the service to all districts, universities and the educational communities. This would be a large bite, and the addition of one more urban district is a "testing the water" aspect that will help to define and perfect the program as we look to the future and to a larger frame of reference.

A two-year period of development and testing has resulted in a technical assistance "bridge" which is now providing the front line operation in certain rural schools with the resource information needed in the never ending challenge of planning, problem solving and decision making related to the improved education of our youth.

This "bridge", which has proven itself effective with several schools throughout the State, consists of a Reference Center within the State Education Agency, supported by project staff in the Center and linked to the schools through the leadership of project resource agents in the field. The development and maintenance of this technical assistance "bridge" has been due largely to the efforts of the project staff and the federal funds which support the activity.

The need at this stage of development is three-fold: (1) the need to institutionalize the system to a point where it is not longer dependent upon the support of federal funds, (2) the need to broaden the scope of effectiveness to include other school districts, and (3) the need to develop computer search capability within our own State Education Agency.

The problem, however, is that unless local district personnel are trained in the use of the technical assistance retrieval system and leadership skills now provided by project staff the technical assistance project will not be institutionalized. The result--the great potential for reducing the gap between what we know and what we do will not be realized.

The purpose of this continuation grant is to institutionalize (maintain as a regular and continuing local and state supported activity

activity in the twenty-five districts that have participated in the project) the Technical Assistance Program which has been developed through federal support over the past two years.

Achievement of this purpose is dependent upon the accomplishment of the objectives of this continuation proposal. These objectives are listed as follows:

Objective No. 1 - Establishment of an Institutionalized Field Agent Program.

Each of the twenty-five districts that have participated in the project will identify one person who will become the local field agent.

Objective No. 2 - To Test the Feasibility of Expanding the Service to Include the Larger Urban Districts Within the State.

For the first two years the project has only served small, rural districts. The State Agency, through the project staff, will select one large school district (at least 10,000 enrollment) to include in the project.

Objective No. 3 - To Provide Computerized ERIC Searches (and the Necessary Research Support for Field Agents) Through the Utah State Education Agency.

To provide computerized ERIC searches to Utah educators through the Technical Assistance Reference Center and the Utah State Data Processing Division and the necessary research support for the field agents by coordinating ERIC services with other national and local dissemination efforts.

Procedures

The following procedures are designed to achieve the above stated objectives for institutionalizing the Technical Assistance Project in the twenty-five districts that have participated in the project and one urban district to be selected.

Procedures related to the achievement of Objective No. 1

The Utah Pilot Dissemination Project has four agents who have received field agent training. This training has consisted of three seminars conducted by the University of Missouri (two in Missouri - one in Utah) and monthly in-service meetings conducted by the project staff.

We propose in the third year of this project to further develop the skills of these four field agents by providing, in cooperation with the Far West Laboratory, a training program which is titled, "The Educational Information Consultant: Skills in Disseminating Educational Information."

We further propose to train twenty-six new agents (one from each of the present twenty-five participating rural districts and one from the large urban district to be added to the project) with this same Far West Laboratory program.

In August the Project Director, Reference Center Manager and four Field Agents will be trained in the Far West Laboratory Educational Information Consultant Program. Arrangements between the State Education Agency and the Far West Laboratory have been completed for this first phase of the 1972-73 training program.

The new agents will be appointed by the school districts in September. The present field agent in each of the geographical regions will become the trainer of the new field agents in his region, with back-up support from the Project Director and Reference Center Manager. The Far West Laboratory Educational Information Consultant training program will be used to train the new field agents.

After the field agents in all of the twenty-six districts have been trained the present field agents in those regions will become "master field agents." They will coordinate, monitor and assist the new agents in the efficient performance of their duties. They will also assume an expanded role in information transformation and become an extension of the Reference Center operation. All of the "master field agents" are officed in a Regional Service Center. Each of these Centers will become a resource center to the newly appointed field agents by providing displays of and access to information about: (a) validated educational programs, (b) services and products of the National Center for Educational Communication, Regional Laboratories, State of Utah, (c) information of other resources, such as Universities, industry, other governmental agencies, etc.

Procedures related to the achievement of Objective 2.

During the month of August four selected local school district superintendents will be contacted. The Technical Assistance Program will be explained to each of them, including (a) history of the project, (b) services offered, (c) duties of the field agent, (d) the Far West Laboratory training program which each new agent will receive, (e) in-service staff development meetings scheduled for the year, and (f) financial obligations of the local district.

Each superintendent will be given thirty days in which to meet with his Board of Education, district staff and other school personnel to determine: (a) desirability of joining the project, (b) availability of a field agent within the district, (c) long-term commitment to the project, (d) need for Technical Assistance Project services.

The Technical Assistance staff will recommend to the Executive Committee of the State Superintendent the two best prospective districts. The Executive Committee will select the district to participate in the project.

Procedures related to the achievement of Objective No. 3.

Much work has been done to make operational in Utah a search system of ERIC and other sources. This effort will be continued and expanded. A total system, complete with logic writers and information transformation specialists, will be operative before December 15, 1972. We have relied on the Northern Colorado Educational Board of Cooperative Services, Boulder, Colorado, for our computer searches. We will continue to utilize this resource for the first three months (July 1 - September 30), with an option to continue the service for an additional three months (October 1 - December 31) if needed, while our own system is being developed. The project availed itself of this option with Boulder and will continue through December to receive the Boulder services.

In the meantime initial contacts were made throughout the summer of 1972 with many ERIC tape programmers:

Dave Altus - South Carolina
Edward Krahmer - North Dakota
Lonnie Berkebile - Center for Vocational & Technical Education
Glen White - Missouri
Bruce Hemminger - Iowa
Jack White - Optimum Computer, Washington, D.C.
Richard Lallmang and Harvey Marron - U.S.O.E.
John Evans - Mitre Corporation

Communication between these men and staff of our Data Processing Division has been established.

The Planning Unit of the SEA was contacted in August to make a system analysis of the programs used by these programmers. Dr. Robert Steffensen took on the task and he and the Reference Center Manager developed a survey instrument (See Appendix incorporating questions on the computer technicalities and the information needs of the retrieval project. The survey was presented at the Downington conference of Information Centers and the ERIC Tape User's Converence. Dr. Steffensen attended these with Kathy Wallentine. The October Quarterly Report (See Appendix) lists the specifics of the activities that have led to installation of the computer program.

In order to provide the necessary research support for the field agents a logic writer and transformation specialist with the following responsibility will be hired:

Job Description:

1. Receive request recorded in normal language from Reference Center Manager or secretary.
2. Execute strategy.
3. Develop logic for computer searches.
    a. Identify and clarify key elements.
    b. Tentatively select appropriate descriptors.
    c. Formulate a comprehensive, descriptive statement.
    d. Transfer statement and descriptors to form used.

4. Review searches for relevancy and return to agents.
5. Assist in the development of PETs (Packets of Educational Topics) and CAPs (Current Awareness Profiles).

The present Reference Center Manager, who now has two years of experience in the project, will assume the role of Project Manager. She will oversee the acquisition of additional resources in the Reference Center and will be more closely aligned to the activities of the "master field agents" as they assume the role of "agents of agents." Her assignment will be one of management more than technician. She will be responsible for the day-to-day monitoring of programs. She will also assume added management duties pertaining to the scheduling of resource personnel, publishing of brochures and announcements, publicizing of the program within the State Education Agency and other management related activities. She also will be responsible for the "quality control" of informational responses sent to clients.

FINAL WORD

The October Quarterly Report will illucidate the progress toward the tasks outlined in the Addendum.

As of this writing the computerized system for searching the ERIC tapes developed by Dr. Edward Krahmer is being installed. An information retrieval agent position has been developed and the actual running of the searches and testing the system will be initiated.

Each agent is in a different stage of identifying new district agents and this will proceed more rapidly as we get the computer system up and running, and the IDIs completed.

Candidates for the "urban district" have come forth and the project is in the selection process of this task,

The day to day operational tasks noted in the Addendum are proceding as time permits.

APPENDIX

AN ADDENDUM

to

Continuation Proposal titled, "Technical Assistance to Rural Schools in Knowledge Utilization" - submitted by Utah State Board of Education.

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AN ADDENDUM

to

Continuation Proposal titled, "Technical Assistance to
Rural Schools in Knowledge Utilization" - submitted by
Utah State Board of Education.

This addendum should be attached to the continuation proposal with all tasks, activities or other plans herein described considered to be a part of the proposal.

Three broad objectives are included in the original proposal. They are:

(1) The institutionalizing of the field agent system.
(2) The piloting of the project in an urban district.
(3) The development of our own computerized retrieval capability and the back up support needed to maintain a viable field agent program.

Institutionalizing the Field Agent Program

The field agents have done an excellent job in making available to sparsely settled rural educators the information needed to make wise decisions and to upgrade educational programs. Two conditions exist which hamper their effectiveness; (1) The great distances each agent has to travel and (2) the organizational structure of the field agent program.

It is physically impossible for the agents to serve well the number of schools for which they are responsible. One agent is responsibile for 10,186 square miles, one responsible for 13,170 square miles, one responsible for 17,492 square miles, and one responsible for 24,282 square miles. The agent whose geographical area is the smallest in size (10,186 square miles) is responsible for thirty schools. The agent whose geographical area is the largest in size (24,282 square miles)is responsible for fourty-seven schools. Some schools are located as far as 125 miles from the agent's office. In order to serve all clients the agents can spend very little time with each client.

Organizationally each of the agents work out of a cooperative service center. He is responsible to a board comprised of the superintendents of the school districts he serves. None of the superintendents consider the agent to be his man. The agents do not function as district staff and find it difficult to keep "tuned in" to the needs and problems of six or more districts.

The field agent plan proposed for FY 73 is an attempt to overcome the two obstacles stated above.

During August the project director will meet with the boards of superintendents of each of the Cooperative Service Centers. The new program will be described and each superintendent be asked to select one of his district staff to assume the field agent role in his district during FY 73. The purpose of this meeting will be to describe to the superintendents the type of person needed to fill the agents role. Dr. Ronald G. Havelock has suggested four areas of competence needed by a field agent. They are:

Specialization: It is most important that the candidate have a strong sense of confidence and competence as an educator, but this does not mean being a specialist and expert in a given area. On the contrary, he should see himself as a generalist. Career commitment to a particular subject matter area such as "reading" or "social studies" curriculum is not desirable. On the other hand, specialties which cut across a range of educational concerns (e.g., administration) or have direct relevance to training and knowledge utilization (e.g., expertise in utilization of audio-visual equipment or information systems) are probably highly desirable.

Attitudes and Values:

(1) Candidates should be committed to the belief that significant improvements can be made in education by a more effective utilization of resources and more adequate appreciation of democratic problem-solving procedures.

(2) They should additionally believe that new roles can be developed within the district to facilitate resource utilization and problem-solving.

(3) They should additionally believe that specific types of training are a necessary part of such role development.

(4) They should be interested in and willing to assume such roles during and after training.

(5) They probably should not be a zealot for particular educational causes, philosophies, or products to the exclusion of others.

Knowledge: (1) Candidates should have a broad awareness of educational needs and problems.

(2) They should have a basic understanding of scientific method and an awareness of the range of potential strategies and procedures for scientific evaluation of education projects.

(3) They should have an understanding and a recognition of the rationale for the program they are about to enter.

Skills: (1) Candidates should be able to read and comprehend social science literature. (This does not mean that a background in social science is necessary, only that there be a reasonable tolerance and facility for reading semi-technical literature in fields outside one's own sphere of specialization.)

(2) They should be able to contribute to and participate actively in small group interaction.

(3) They should be able to compose and write for general audiences.

(4) They should have some ability to talk and make presentations and demonstrations before groups.

(5) They should be able to interact with superiors without undue inhibition.

(6) They should show some evidence of leadership ability.

(7) In no case should they be coming to the program because of failure to perform in other assigned roles in the state education agency.

Superintendents will be asked to choose the one person on his district staff that most nearly meets these entry requirements. * See insert.

In addition, each of the local agents selected will be trained as Educational Information Consultants. This program was developed by the

INSERT

Each of the "Master Field Agents" has attended training sessions intended to develop the four Areas of Competence identified by Dr. Havelock and outlined above. By October 31, 1972 an instrument will be developed by the Research Division of the State Education Agency to diagnose significant strengths and weaknesses of each of the new field agents. Training programs will be designed by the Research Division and The Planning Unit and implemented by the Master Field Agents to correct identified deficiencies. This training will be individualized to the needs of each new agent and a systematic plan for amelioration of weaknesses continuously conducted throughout the year.

Far West Laboratory for Educational Research and Development, Berkeley, California by Dr. Bela H. Banathy. The training program, called an Instructional System, has seven component parts, i.e., (1) Negotiation, (2) Retrieval, (3) Transformation, (4) Communication, (5) Evaluation, (6) Reformulation, (7) Adjustment.

The course content is divided into five modules of fifteen sessions. A description of the modules follows:

> Introduction (Sessions 1,2): Emerging Role of the Educational Information Consultant. The module opens with a brief presentation on the growing need for dissemination of educational information, the development of a linkage system to bring information from resource to user, and the role of the Educational Information Consultant (EIC) in that linkage system. Trainees are oriented to the basic processes comprising the EIC role: negotiation, retrieval, transformation, communication, and evaluation. Trainees then read and discuss case histories of persons operating in EIC roles at four different levels within the information dissemination network.
>
> A communication game is then played in pairs. Initially, the communication between each pair is one-way, one member giving the other directions for putting a "T-puzzle" together. After a limited time, two-way communication is opened. Finally, a visual demonstration is permitted. Trainees engage in a concluding discussion of basic problems involved in communication and relate their experience during the game to the interactive processes associated with the EIC role.
>
> Module 1 (Sessions 2, 3, 4, 5): The Negotiation Process. The module opens with a preparatory diagnostic exercise in whch a telephone negotiation between an EIC and a client is presented on audiotape. Trainees design a form for recording the results of the interview and also record observations of the negotiation process. They discuss this introduction to the topic of negotiation within the context of their outside reading and the ideas considered in the opening sessions.
>
> Trainees then form triads to participate in a structured role-playing exercise on the negotiation process. One member of the triad plays the role of an EIC; another, the role of a client; and the third, an observer. The persons playing the roles of client and EIC conduct an interview to define the client's specific instructional problem and to identify his corresponding information needs. The person in the observer role evaluates their effectiveness in performing the negotiation. Each triad then discusses descriptors selected by the EIC and client to search for information relevant to the problem. They also exchange feedback on their performance. A brief, large-group discussion for comparison of descriptors and for analysis of negotiation skills and techniques follows.

After a discussion of preparatory readings on the negotiation process and a brief introduction to the forthcoming exercise, trainees divide into teams of four. Members alternate in the roles of EIC, client, and two observers so that each has an opportunity to act as a client and negotiate his own prepared problem with another team member playing the role of EIC. (The person acting as EIC will adopt his client's problem as his own topic for subsequent retrieval, transformation, and communication assignment during the course.) During negotiation, each EIC records data about his client's problem and information needs on a checklist he had designed as a preparatory assignment. After two of the prepared problems have been negotiated, the team pauses to evaluate them. This feedback process is repeated when the remaining two problems have been negotiated.

For the application exercise, trainees record their analysis of the same audio-taped negotiation interview which opened the module.

Module 2 (Sessions 5, 6, 7, 8): The Retrieval Process: A short, objective preparatory exercise opens this module. A review and discussion of readings on problem definition, selecting descriptors, and search strategy follow.

Trainees next examine a "Search Procedure Form." They complete an individual written exercise in which each records a brief statement of his client's problem and the descriptors selected. Trainees then group for a round-table "brainstorming" session, during which each trainee presents his problem to the group members who can suggest descriptors and/or approaches to employ in his search.

Each trainee is introduced to the Guide to Educational Resources and is instructed how to work with a "Search Procedure Form." Trainees also examine selected secondary information sources, such as CIJE, RIE, and Education Index, as possible starting points for their search. Pairs of EIC's and clients also have an opportunity to meet briefly to renegotiate or reformulate their problem.

An exercise on abbreviations, completed as a preparatory assignment, is the vehicle for a large-group discussion of frame of reference and its effect on understanding of the client's problem and definition of the search. Trainees also consider the influence of risk-taking behavior, knowledge-state, and personality attributes on EIC selection and use of resources.

Discussion is then directed to alternative educational information sources. Two filmstrip presentations on the ERIC and DIALOG research information system are followed by an introduction to the Far West Laboratory's curriculum information system, ALERT (Alternatives for Learning through Educational Research and Technology). Trainees also evaluate individual and group performance on a second outside assignment, "Making Relevance Judgments," in which they analyze the pertinence of abstracts on ERIC documents to two search topics. The exercise is designed to sharpen skills in selecting and screening documents appropriate to the client's problem. The module concludes with a written application exercise on the retrieval process.

Module 3 (Sessions 8, 9, 10): The Transformation Process. An individual, written preparatory exercise, simulating the process of selecting, organizing, and synthesizing a package of information for a client, opens this module. Trainees then read and participate in a large group discussion of the Transformation Guidelines, which outlines skills and techniques involved in transforming retrieved information, and the Transformation Checklist, Which lists various types of transformation formats.

Trainees next survey selected examples of transformed information--bibliographies, handbooks, state-of-the-art reports, literature reviews, etc.--and identify them by type, purpose, and intended audience. Each trainee individually plans transformation of information on his client's problem.

Trainees engage in a large-group discussion of abstracting as a method of transformation, based on outside readings and a review of Guidelines for Abstracting. Trainees consider two types of abstracts--indicative and informative--and compare the abstract they have written as an outside assignment with samples of both types. The module concludes with a written application exercise, which is similar in structure to the preparatory exercise.

Module 4 (Sessions 10, 11, 12): The Communication Process: The module on Communication is introduced through an individual preparatory exercise in which each trainee composes a letter conveying a package of transformed information to a hypothetical client. Trainees then form small groups to engage in review of a preselected information package, with the objective of developing a role-playing skit of an EIC/client, face-to-face communication. Selected members of each group then role-play the skit for their own and another group, whose members evaluate the performance. A large group discussion of the role-playing activitv and the communication process concludes the activity.

Trainees briefly discuss a set of Guidelines for Conveying Information to Client. They then reconvene in the teams of four formed during the negotiation module to rotate playing EIC, client, and two observers. Each EIC communicates the findings of his search. He presents to his client a package of information which he has organized and abstracted to satisfy the client's request. Observers give feedback to each EIC; the team, as a whole, evaluates the effectiveness of all four EIC/client communications. Exemplary EIC reports are selected by the teams for presentation to the rest of the trainees. A large-group critique concludes the activity. As an individual application exercise in communication, each trainee submits a letter conveying his information package to his client.

Module 5 (Sessions 13, 14): The Evaluation Process: Trainees participate in a large-group discussion of the evaluation process. They consider problems, sources, methods, and techniques for evaluating performance of: (a) each major EIC process; (b) the EIC role; and

(c) the center, library, or system in which the EIC is functioning. Individual trainees make oral presentations to the large group, evaluating information centers they have visited and utilized. Trainees also review and discuss case histories and readings on the information center and personnel in terms of the evaluation process.

Conclusion (Sessions 14, 15): The course concludes with a written final examination--an application exercise on the major EIC processes and skills covered in the five instructional modules. Trainees then discuss and evaluate the course and receive feedback on their performance from the instructor. (A "floating," three-hour instructional reserve is included in this segment. This reserve may be used at any point during the course when extra time for discussion or instruction appears needed or saved for in-depth, end-of-course feedback to trainees.)

The duties of the local field agents will be:

(1) To contact each school in his district and explain:
  (a) The role of a field agent.
  (b) The way a field agent operates.
  (c) The resources which a field agent can bring to bear upon an identified problem:
    (1) The knowledge base.
    (2) Human resources.
    (3) Local, district and state financial resources
(2) To work closely with local school and district personnel in the identification of educational problems.
(3) To provide local school and district personnel with continuing support by providing information and human resources which help in the amelioration of the identified problem.
(4) Develop in each local district files of available personnel with expertise in various subject areas.
(5) To become knowledgeable about the content of the knowledge base and skilled in tapping that base for needed information.

Each new field agent will begin functioning in his own district on October 1, 1972. He will visit each school in his district at least once a week during the month of October. After a month of operation consisting of weekly visits to each school the local agents will begin in November to concentrate on critical problems which will require concentrated effort.

Each of the agents will spend little time in travel and hence spend much more time in the schools fulfilling the field agents role. Also, each agent, as a district staff member will be closely atuned to the goals and aspirations of the district administration and the administration of the individual schools. His activities will be closely monitored and aided by the "master field agent," those field agents who have two years experience in the role working out of the Cooperative Service Centers. These "master field agents" will initially make regular visits to the local agents, to keep them appraised of new developments, to specifically help in the negotiation and transformation process, and to systematically help the agents develop the inter-personal skills necessary to be successful field agents. In addition the master field agents, with back-up assistance from the project director, project manager and retrieval specialist will hold monthly in-service meetings in each region for the local field agents.

The central project staff has been in close contact with Dr. William J. Paisley and personnel of the System Development Corporation, who jointly have been funded to develop training resources for "educational extension personnel." The Utah Pilot Dissemination Project Director has been invited to become a member of the Educational Extension Training Resources Advisory Committee. Any programs which are developed will be used to train field agent personnel in Utah. It is expected that we will work very closely with Dr. Paisley to identify knowledge and skills needed by field agents and to help to field test any materials which he and System Development Corporation may develop.

The master field agents working closely with the central project staff will develop in each Cooperative Service Center a number of resources to help the local field agents. Some of these might include:

(1) A file of local educators with expertise in various subject areas.
(2) A file of University personnel with expertise in various subject areas.
(3) A file of local resource personnel (business men, industry representatives, etc.) who would serve the schools.

(4) A file of State Education Agency Personnel.
(5) RIE, CIJE indexes.
(6) NCEC validated program descriptions, i.e., Early Childhood, Reading, etc.

(7) PREP Kits.

Monthly in-service meetings of central project staff and master field agents will be held.

Effects Over Time of Institutionalized Field Agent Program

Technical assistance and the use of the knowledge base will become an integral part of the day to day operation of the twenty-five districts served by the project. Skilled agents in each district will make knowledge utilization a regular and systematic function of the school personnel within the district. Success will be determined by:

(1) An increasing number of information requests of at least 10% per year for the next three years by the schools of each district.
(2) The identification of and long range planning to correct educational problems of greater scope and magnitude than those problems identified during the first two years of the project.
(3) An increasing number of information requests of at least 15% per year for the next three years by the district staffs of each of the districts.

The Piloting of The Project in an Urban District

During the first two years of the Utah Pilot Dissemination Project only small rural districts were included in the project. During the third year of the project the procedures for expanding the service to an urban district will be tested.

The following procedure will be used to select the new district:

August - Superintendents will be contacted and the program explained to them. Districts will be invited to apply for admission to the project. One member of the Executive Committee of the State Board of Education will meet with the applying Districts' representatives to outline to them the place of "Technical Assistance" in the total scheme of State Agency operation. Those items covered by the presentation will be:

(1) The role of the State Education Agency professional staff in "Technical Assistance." *
(2) The role of local District professional staff in "Technical Assistance." **
(3) The commitment of the local district to:
    (a) Name and fund the field agent
    (b) Integrate "Technical Assistance" into the on-going district operation.
    (c) Provide the moral support and help create the atmosphere in which "Technical Assistance" will flourish.

September - Executive Committee of the State Board of Education will select the District for inclusion in the project based upon the written commitment of the District to items 1, 2, and 3 above.
Field agent from the selected district be trained in the Far West Laboratory EIC program along with the twenty-five new agents from the rural school districts.

October - The new field agent will begin work. He will be monitored by the project manager. He will attend in-service meetings during this month and all future months with the central project staff and the "master field agents." His specific role will be to create awareness on the part of local educators of the resources and assistance available through the State Education Agency and other sources. He will encourage local educators to seek help in problem solving and planning. He will facilitate Local Education Agency's requests for help and State Agency's response.

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* See Addendum Appendix A
** See Addendum Appendix B

He will accomplish this by:

(1) Contacting each school in his district and explaining:
   (a) The role of a field agent.
   (b) The way a field agent operates.
   (c) The resources which a field agent can bring to bear upon an identified problem:
      (1) The knowledge base.
      (2) Human resources.
      (3) Local, district and state financial resources.
(2) Working closely with local school and district personnel in the identification of educational problems.
(3) Providing local school and district personnel with continuing support by providing information and human resources which help in the amelioration of the identified problem.
(4) Developing in each local district files of available personnel with expertise in various subject areas.
(5) Becoming knowledgeable about the content of the knowledge base and skilled in tapping that base for needed information.

Effects Over Time of Expanded Technical Assistance Program.

The Technical Assistance Program in the new district will be judged a success if after six months of operation:

(1) 80% of the principals and 50% of the teachers of the district can explain the functions of Technical Assistance.
(2) 30% of the principals and 20% of the teachers of the district have utilized Technical Assistance services.
(3) 15% of those mentioned in (2) above make a second request for technical assistance.
(4) At lease three other district superintendents apply for participation in the program for FY 74.

The Development of Our Own Computerized Retrieval Capability and the Back Up Support Needed to Maintain a Viable Field Agent Program

The purpose of the Utah Pilot State Dissemination project has been to provide the linkage between the educator and his problems and the national data base (ERIC and others). It has been assumed that better decisions are made when information relevant to the problem is utilized.

This linkage has consisted of a reference center established in the Utah State Board of Education and the field agent services described in an earlier section of this addendum.

The State office staff and their roles have been:

(A) Technical Assistance Coordinator (Project Director) - He has assumed responsibility for proper functioning of all components of the system including necessary technical assistance to the districts to effect the linkage between user and resource. The TA Coordinator, working directly under the Deputy Superintendent for Instruction, has organized and coordinated the work of Technical Assistance Teams consisting of appropriate SEA staff members, and, when necessary, outside consultants to provide special competencies not presently available on the SEA staff. These TA Teams have served the districts as required in response to Ad Hoc requests, in helping provide competencies in planning or problem solving, in helping design solutions and in organizing and making usable to the districts information retrieved from outside resources. In addition to this responsibility of providing a smooth linkage of districts to resources in the form of information and assistance, the TA Coordinator has been responsible for involving the SEA staff in the project, in providing the "linkage"between the project and the SEA staff. He has followed progressive steps for insuring SEA staff cooperation from creating awareness, through Ad Hoc cooperation on to teamed problem solving.

(B) Reference Center Manager - She has developed an awareness of potention resource systems, determined their accessibility, their relevancy and their potential. She has contacted the most relevant and accessible of these resources and initiated two-way interchanges with them. She has tested the actual resource giving capacity of these outside resources. One resource she has exploited in the fullest is the computerized resource retrieval project at Boulder, Colorado. This center, under a Title III grant, has served the USEA during the 1970-71 and 1971-72 school years. It has programed all ERIC information as well as all Colorado State Library materials and major University resources in Colorado. The Manager has also identified and established communications with resources such as universities, school improvement projects, and Title III projects. She has inventoried the resources available in the SEA in terms of help in identifying and assessing outside resources and in providing agency expertize in serving clients. As a result, she has been able to respond to district and SEA needs effectively with information and resources.

(C) Secretary - She has received, opened, stamped, and routed all incoming mail. She has recorded and logged all incoming requests - numbered, dated and gave to Reference Center Manager to review and send to Boulder or elsewhere. Recorded and logged all incoming profiles, prepared for Reference Center Manager to review, packaged and mailed. She has taken dictation, transcribed and mailed - also answered selected correspondence. She has xeroxed, packaged and mailed information to clients and field agents. She has taken requests for microfiche, retrieved, recorded in log book, stamped on Center address, added evaluation form, and forwarded to requester. Kept accurate record of microfiche and ordered duplicates. Typed all correspondence pertaining to microfiche. She has compiled, typed, xeroxed,and mailed monthly report for the Technical Assistance Project. She has performed all other secretarial duties.

The goal of the Reference Center has been to quickly and fully satisfy information requests from the State Agency staff and persons served by the local extension agents, as well as local school improvement projects.

The following procedure has been used to provide clients with information:

The request is received from the client by the agent. The question is negotiated until the agent feels he knows what information the client wants. The agents have been encouraged to become as familiar with the ERIC descriptors as possible to keep the request accurate. The requests are then typed and recorded in the Regional Service Center by the agent's part-time secretary and relayed to the Reference Center.

If the agent feels he has something in his files that will aid the client, i.e., a local resource, a print of AV material, or ERIC materials, he will take these to the client and record the local action on the request form so the Reference Center will know what has been done to date on the request. These requests are recorded and listed in the monthly reports.

Another procedure is the instant search which is used occasionally. The Regional Service Center secretary pulls quickly an ERIC document relating to the client's request and usesit to clarify terminology for the agent and the educator.

The request is then transmitted to the Reference Center in the SEA where it is reviewed, logged in, and in many cases desnigated for local searches as well as being sent to the Boulder Retrieval Center for a computerized search of the ERIC data base. The turn around time on the Individualized searches is 2-3 weeks while packaged materials take 1-1 1/2 weeks. The Reference Center Manager does the local search for whatever type of information is needed, utilizing any of the resources that have been developed by the project. Boulder calls the Reference Center weekly to clarify requests or to discuss the system.

The profiles, or packets of abstracts, are returned, logged in and screened by the Reference Center Manager. This screening determines accuracy of request of materials. The manager keeps current on information sources and provides information which may be used in filling other requests.

The profiles are returned by mail to the agent. The next step is at the agent's discretion. Some agents read reports thoroughly and discard irrelevant abstracts. Others feel the client should make the choice of what is needed and only notes more pertinent abstracts. The agent then takes the profile to the client and goes over it with him. The purpose of the abstract packet is to give an overview of a full document. The client then selects what he feels is important and selects the documents he would like to see "in full". He requests the document in microfiche form. The agent transmits the request to the Reference Center and the microfiche is sent out to the agent who takes it to the client with a microfiche reader. The use of microfiche was an economic decision. Hard copy is expensive and it is a very slow process to obtain it, and when received it is generally shelved and not utilized by the educators. It was a gamble to see if educators would take to the microfiche format, but our clients have taken well to this format, so much so that there is a great need for more microfiche readers to serve more clients at the same time. If after reading the microfiche document the client desires a microfiche copy of his own, this desire is relayed to the Reference Center. An order for the microfiche copy is sent to the Utah State Archives. (Fiche to fiche duplication.) This service of the State Archives has been excellent and without cost. Turn around time has usually been one day. The copy is sent to the client. If the client wants the document in hard copy the agent helps him with the ordering, but the client pays for the copy. A reader printer is available in the SEA and pages may be reproduced for the client. The cost is .15¢

per page and $1.00 minimum. There is a growing use of this capability also. There is a growing use of the fiche duplication service. The State Archives also have the capability to produce original microfiche.

It is the Reference Center's responsibility to coordinate the retrieval capabilities, to do the local searching necessary, and to provide any follow up necessary, either informational or in providing assistance from any of the resources of the project, such as locating viable programs from Labs and Centers, local Utah programs for visiting, or consulting with specialists when necessary.

The Technical Assistance Project in Utah has used the distant Boulder Retrieval Center for two years as a source of ERIC searches. It seems advisable at this point in time to consider and to select and implement a local computerized search strategy for the ERIC system.

Reasons for this are:

Time: Boulder did go to packaging to save time, but this type of packaged research material is good for a specific purpose and clientele. Individualized searches, which are the heart of the ERIC system, still take 2-3 weeks. Immediate turn around time has not been a great need, except in specialized cases, but better turn around time is necessary for effective implementation of research materials. Other types of packaging will be studied by the project during FY 73.

Cost of searches: This year July '71 - July '72 the average cost based on the $9,000 contract with Boulder was approximately $5.66 per search. The cost table for FY 73 from Boulder is: (Cost per search)

PRODUCTS	A $10,000.00 Contract	B $12,000.00 Contract	C $15,000.00 Contract
A. SID-RIE	$ 17.00	$ 16.00	$ 15.00
B. SID-CIJE	$ 14.00	$ 13.00	$ 12.00
C. SID-AIM & ARM	$ 10.00	$ 9.00	$ 8.00
D. PET	$ 12.00	$ 11.00	$ 10.00
E. CAP	$ 12.00	$ 11.00	$ 10.00
F. CAT	$ 12.00	$ 11.00	$ 10.00
AVERAGE/PRODUCT	$ 12.83	$ 11.85	$ 10.83

The State has selected the $12,000 figure for FY 73. The State will contract for services on a three month basis, with an option for an additional three months. This is $3,000 for three months searching at $1,000 a month. Types of searches may be selected from Boulder as from a bank account. However, this does cause restraints on the number of searches, which would be a great hindrance, at such future time as we plan to go "State-wide." Costs have increased and Utah is at the mercy of a distant retrieval source. The money can be well spent locally in developing the local system.

Changes in the system: Utah becomes the victim of changes made by Boulder in its system as there is no decision making input from the states with Boulder, only in the line of question negotiation. For example, mailing changes and changes in document request forms have caused frustration in the Utah retrieval unit.

Relevance of materials: This is a most important item. A more efficient system for obtaining relevant searches can be developed when the retrieval process is closer to the client. TAP conclusions on computerization seem to be borne out by the Columbia Evaluation Report by Loya Metzger, "A state should plan initially to provide its own computerized search capacity. Reliance on a regional installation means that the information service will have little chance of influencing such matters as turn around time, relevance or adequacy of the computerized search. Thus, resorting to a distant computer service should be viewed at best as a stopgap measure, one that will ultimately prove unsatisfactory."

Computing System: The Utah State Board of Education Division of Data Processing has acquired an IBM Model 145 computer which is capable in its present configuration of supporting the software necessary to process ERIC searches. No system has been in operation long enough to demonstrate reliable computing services. Last year when an attempt was made to install QUERY I on RCA equipment the installation could not be completed because of technical problems. The Division of Data Processing with its new installation no longer suffers from these problems.

Work Plan for Selecting and Implementing a Local Computerized Search Strategy for the ERIC System

Task #1

Generate alternative computerized strategy.

Aug. 72 Activity #1 - Appoint a task force consisting of the Technical Assistance Project Director, the Technical Assistance Project Manager, the System Analyst with The Planning Unit, and the Systems Manager of the Division of Data Processing to determine hardware and software requirements to support local search computerization.

Sept. 72 Activity #2 - The task force determines the hardware and software requirements for the local computerized search strategy.

Sept.-Oct. 72 Activity #3 - The task force uses elements from the specifications to survey existing computerized search strategies.

Nov. 72 Activity #4 - The task force combines existing computerized search strategies with the requirements for local computerization to determine conformities and discrepancies.

Nov. 72 Activity #5 - If an existing search strategy favorably conforms to the local strategy requirements a request for a decision to acquire and implement the existing strategy will be made.

Nov. 72 Activity #6 - If no existing search strategy conforms to the local strategy requirements the task force will determine the ability to develop the search strategy locally.

Nov. 72 Activity #7 - If no existing search strategy is suitable and the ability to develop the strategy locally is not possible, the task force will recommend continued searches from Boulder, Colorado.

Task #2

Implement the selected strategy for performing ERIC searches.

Aug. 72 Activity #1 - Until ERIC searches can be performed locally, Boulder will be contracted to supply them. In the event that a local search strategy cannot be provided searches will be continued at Boulder.

Oct. 72 Activity #2 - If an existing search strategy is to be installed the Systems Manager of the Division of Data Processing will make an assessment of the requirements for installing the system and submit them to the above mentioned task force for consideration.

Oct. 72 Activity #3 - The task force will evaluate the Systems Manager's assignment of the proposed strategy to determine the resource requirements for installation.

Oct. 72 Activity #4 - The task force will submit the determined resource requirements to the coordinator of the Technical Assistance Project for approval.

Nov. 72 Activity #5 - The coordinator of the Technical Assistance Project will seek approval for the proposed strategy resource requirements from the Executive Committee.

Nov. 72 Activity #6 - The Executive Committee will indicate approval of the request to utilize required resources to install the strategy.

Nov. 72 Activity #7 - If approval is given the Systems Manager will make the arrangements to install the proposed existing strategy together with a timetable of anticipated completion of installation.

Nov. 72 Activity #8 - If approval is not given for installation of the proposed strategy by the Executive Committee, the task force will consider either an alternative existing strategy or recommend continued service at Boulder.

Dec. 72 Activit[illegible]9 - Upon completion of the installation of the proposed existing [illegible]rategy the Technical Assistance Project manager will assume managerial responsibilities for utilizing the strategy in accordance with the operation of the Technical Assistance Project staff.

Dec. 72 Activity #10 - Requests for searches will be processed by the Technical Assistance Project staff and made ready for processing by the Division of Data Processing.

Dec. 72 Activity #11 - The Division of Data Processing will process the requested searches and return the information to the Technical Assistance Project staff.

Dec. 72 Activity #12 - The Technical Assistance Project staff will disseminate the resulting search information to the requester.

Personnel Required to Staff the Technical Assistance Project during FY 73

Project Director

The Project Director will provide general supervision and administrative responsibility for the project. As a member of the State Agency's Executive Committee, Planning Council, and Administrative Council he will integrate all Technical Assistance activities into State Agency activities. He reports directly to Dr. Lerue Winget, Deputy Superintendent, Office of Instruction Services, and meets semi-monthly with the Division Administrators who also are responsible to Dr. Winget. He will be administratively responsible for Technical Assistance Project personnel. He will serve as Utah's liaison representative on the National Dissemination Project. He will represent Utah State Board of Education nationally on all matters related to dissemination.

Task: Represent Technical Assistance on SEA Executive Committee
Activities:
FY 73 1. Correlate Technical Assistance into all programs about which Executive Committee makes decisions.
FY 73 2. Provide information for decision making.
FY 73 3. Represent the Technical Assistance Program concept in all SEA Executive Committee deliberations.

Task: Represent Technical Assistance on SEA Planning Council.
Activities:
FY 73 1. Propose programs and activities of Technical Assistance that have Agency-wide implications.
FY 73 2. Provide information for decision making.
FY 73 3. Represent the Technical Assistance Program concept in all SEA Planning Council deliberations.

Task: Represent Technical Assistance on SEA Administrative Council
Activities:
FY 73 1. Represent Technical Assistance Program concept in all SEA Administrative Council deliberations.
FY 73 2. Provide information for decision making.
FY 73 3. Integrate Technical Assistance into plans for implementation of all Administrative decisions made by SEA Administrative Council.

Task: Assume responsibility for Technical Assistance Personnel.
Activities:

Aug. 72 1. Meet with 25 district superintendents to arrange appointment of 25 new field agents.

Aug. & Sept. 72 2. Complete negotiations for adding one new urban school district to the project.

Aug. 72 3. Complete arrangement and conduct EIC training for central project staff.

Sept. 72 4. Complete negotiations for assignment of one new field agent in new urban district.

Sept. & Oct. 72 5. Oversee EIC training for 26 new field agents.

FY 73 6. Arrange for and conduct monthly in-service training meetings of central project and staff, and master field agents.

FY 73 7. Over-see in-service activities of local field agents. These meetings will be held on a regional basis.

Task: Serve as Utah's Liaison representative on National Dissemination Project.
Activities:

FY 73 1. Represent Utah at National Dissemination Conference meetings and respond to questionnaires or other assignments given to State dissemination liaison representatives.

Project Manager

Day to day management of Technical Assistance will be the responsibility of the Project Manager. Her responsibilities fall in three categories; i.e., Planning, Organizing and Supervising.

Tasks related to Planning:

Planning the day to day operation of the Reference Center.
Planning related to maintaining a steady flow of information and practices for use by the information-dissemination unit.
Planning strategies for working with Regional Center staffs and agents so Regional Centers become resource dissemination units.
Planning strategies to incorporate on a more operational level the SEA specialists.
Planning for the expansion of the Reference Center and more efficient retrieval capability, through the use of research information gathered in the past two years.
Planning to extend the Extension Agent concept in Utah.
Planning to coordinate the retrieval and implementation function in the daily operation.
Planning standards for agent practices, I.E., requests, time, equipment, etc.

Tasks related to Organizing:

Coordinating and scheduling resource personnel.
Redefining the information system to better meet the needs of clients.
Organizing computerized retrieval procedures.
Publicizing the project.
Overseeing acquisitions and resources.
Developing coordinated planning for and utilization of educational information retrieval-dissemination resources throughout the State.
Developing descriptions of exemplary programs with the State.

Tasks related to Supervising:

Developing standards for performance of personnel
Developing effective evaluation criteria and forms.
(This function will be filled in cooperation with the SEA Planning and Evaluation Unit.)
Evaluating the reporting system to give more implementation data rather than statistics of retrieval system.
Maintaining systematic feedback of the usefulness of information and utilization services at the State levels to NCEC.

1. DAY TO DAY OPERATION OF THE PROGRAM.

A. OFFICE PERSONNEL - Supervision of the full time duties of the Information Specialist, secretary and clerical help.

B. AGENTS - Closer alignment with activities of the present four field agents.

Communication: Task: Devise with the agents better communication strategies within the project.
FY 73

Activities:

1. Set up specific calling times to clarify requests and outline retrieval directions according to the client's needs.
2. Revise present recording procedures to a minimum of effort.
3. Produce materials to clarify negotiations.
4. Visit the centers more often to develop new ways of communicating effectively.
5. Continue the monthly staff meetings.

Transformation: Task: Strengthen follow-up or transformation procedures. Transformation of retrieved research information should not be confused with implementation of programs. Transformation is one step in the retrieval process that will help identify later implementation procedures.
FY 73

Activities:

August 1. Far West Lab EIC training program.
Sept. 72 2. Coordination with and utilization of Dr. William Paisley's training package.
FY 73 3. Time will be allocated for the agents to initiate any new procedures they find applicable to transformation process.
4. Guidelines for screening of research materials will be distributed and tested.

Evaluation: Task: To develop an adequate evaluation device that will cover both information retrieval processes and the implementation work of the field agents.

Activities:

Jan. 73 1. Use the services of the Utah State Board of Education Planning Unit to assist with this instrument.
Oct. 73 2. Develop an adequate reporting system within the project to develop and give current studies on at least two case studies per agent per month.
FY 73 3. Cooperate with the new NCEC project to study the collection of data needed for projects of this type.
4. Analysis of record keeping as a possible answer to the agent overload problem.
5. Although new agents will be added to the system and information retrieval will be diffused even possibly to the individual school level, careful feedback is needed as we procede. Emphasis should be put on developing a working plan for keeping the interpersonal relationship between agents uppermost. Data may be relayed to Dr. William Paisley as he develops training packages.

User Needs Study:	Task: To survey yearly client's information needs.
	Activities:
Nov. or Mar. 73	1. To utilize the expertise of the Stanford Sensing Network information and yearly to cooperate with this needs assessment. This can be done more successfully during FY 73 if the time of the year is more convenient and clear instructions are devised. To this would be added the project's own formative evaluation technique.

Regional Resource Centers:	Task: To assist in the developing of Utah's Regional Centers into Resource Centers as back up for present agents dissemination capabilities.
	Activities:
Oct..72	1. Review materials each Center now has.
Jan. 73	2. Supply with materials from R & D Centers, NCEC, Regional Laboratories, others.
	3. Supply with PREP and USOE products.
Sept. 72	4. Kick off activity will be the Educational Products Display to be held during UEA and the follow up activity with the multi-media kit supplied by USOE.
Jan. - Feb. 73	5. Devise specific strategies for the consulting of Regional Center's personnel as recources on client's request, as a first step thereby strengthening the Center and the agent's cooperative role of more efficient service to client.
FY 73	6. In local TAP advertising specify the Regional Specialists who may be of assistance.
Jan. - Feb. 73	7. Closer cooperative links with State Department specialists will be tested. See 2. - Coordination of Programs and Activities.

The development of Resource Centers in rural areas is not to be confused with the decentralization of the information retrieval function. Dissemination activities will include all types of alternatives for school implementation including State produced programs, national products and local programs.

Training and Utilization of Present Agents:	Task: Develop and test several strategies per agent based on Sam Sieber's *Developing a Strategy Based on Particular Clients and Their Settings*.
	Activities:
Jan..73	1. Study this document as a project to see how it might be implemented.
Jan. 73	2. Work with State Agency Planning and Evaluation Unit to develop strategies.
Mar. 73	3. Test each strategy in a minimum of two settings.

New Agents:	Task: Information retrieval training and follow-up by retrieval staff to build an effective system beyond the present agent.
	Activities:
Sept. 73	1. EIC workshops.
FY 73	2. Visits with the agents and the new agents to clarify procedures and provide resources.

a. Provide RIE materials and Readers to new center.
b. Survey information products needs of new agents - RIE, PREP, etc.
c. Explain program with the Transparencies developed.
d. Provide Request Forms and instruction brochures on request formation.

2. COORDINATION OF PROGRAMS AND ACTIVITIES

SEA	Task: To test with two SEA specialists specific techniques of dissemination and technical assistance.
	Activities:
Dec., Jan. Feb.	1. Coordinate the services of the specialists and their products with EEA and regional resource personnel.
FY 73	2. Devise terminology, current awareness and clear concepts regarding the subject matter areas that can be used in request delineation.
	3. Develop reporting procedures to assist both specialists and agents with follow-up activities.
STATE BOARD	Task: To present TAP program to State Board of Education Chairman.
USOE-ERIC-CLEARINGHOUSES:	Task: To conduct a workshop on ERIC clearinghouse activities.
	Activities:
FY 73	1. Continue consultation and feed back to USOE activities.
Jan. 73	2. Explore the possibilities of having a clearinghouse workshop in the State for the expanded project.
FY 73	3. An ERIC acquisitions program was begun last year, and this would be expanded during FY 73.
STATE PROJECTS	Task: To formalize procedures for selective dissemination activities among specialized projects and programs of the State.
	Activities:
	1. In cooperation with the State Agency Planning and Evaluation Unit survey information needs and develop a formalized procedure for serving programs and projects such as: U-SAIL - An Individualized Education Project Title III Projects Career Education Library development Experimental Schools Projects Teacher Leadership Projects Special Education Media Center (State) Instructional Media Center
BOULDER RETRIEVAL CENTER	Task: To secure better service and more relevant products from Northern Colorado Educational Board of Cooperative Services.

Activities:

July 72-
Dec. 72

1. Continue to clarify requests, cooperate for relevant searches and use the service keeping within limits of time money restraints.
2. Limit searches to SID's and PET's insofar as practical..

3. PUBLICIZING THE PROJECT

Task: To acquaint more educators with the services of the Pilot State Dissemination Project.

Activities:

FY 73

1. A new brochure will be developed.
2. Educational Products Display will be advertised through news media.
3. Development of other mediated presentations will be developed in cooperation with the Instructional Media Division.
4. Assistance will be provided in distributing releases to the rural areas through the Public Information Unit.

4. OVERSEE ACQUISITIONS AND RESOURCES

FY 73 Task: The Project Manager will continue to gather relevant resources, subscribe to current print materials, and build files of national programs.

5. QUALITY CONTROL OF INFORMATION RETRIEVAL SERVICES

Task: To continually upgrade the information retrieval process. It has been found that individualized searches are preferable for some clients and that pre-packaged packets are of great value to other clients.

Activities:

1. Master field agents will help the district agents prepare requests.
2. All requests will be carefully reviewed by the retrieval staff.
3. Research materials will be carefully screened by Project Manager, agents, and SEA staff as time permits.

The needs of the Utah clients will be studied and a rationale developed for Utah's efforts in this direction. A quote from Loya Metzger's Problems In Information Retrieval, "To the extent that packages are used, it should be with full awareness of possible differences in approach to users and in their likelihood of effecting change as between information supplied on this basis and the aim of individualized service. One must simply assume that the appeal of packaged information to clients lies in its content.........". The transformation work would be closely allied to this study. The recommendations of the Columbia Evaluation Team will be used to guide considerations in this area.

Information Specialist

The Information Specialist will work under the immediate supervision of the Project Manager.

1. He will be responsible for completing the negotiation process with the field agents.
2. He will be responsible for preparing requests for data processing, and transmitting them to that division.
3. He will be responsible for checking all information received from data processing for accurracy and relevancy.
4. He will aid the Project Manager in the development of packets and any other assigned activities related to the Center.

Task: Complete negotiation process.
Activities:
1. Read requests for clarity and conciseness.
2. Contact field agents to correct inconsistencies and uncertainties.
3. Rewrite the request when appropriate.

Task: Prepare requests for data processing.
Activities:
1. Code descriptors for search.
2. Transmit requests to Data Processing.

Task: Receive information from Data Processing .
Activities:
1. Read information received from Data Processing.
2. Take out irrelevant material.
3. Determine if information meets client need.
4. If information is satisfactory, give to secretary to transmit.
5. If information is unsatisfactory, recode descriptors and re-submit to Data Processing.

Task: Development of packets.
Activities:
1. Visit Regional Service Centers to analyze needs.
2. Talk with clients to determine needs.
3. Develop form and format of packets for Project Manager's approval.

PROJECT COST ESTIMATES
FY 1973

Project Director:	Kenneth P. Lindsay
Institution or Agency:	Utah State Board of Education
Proposed Duration:	12 months - from July 1, 1972 to June 30, 1973

A. Direct Costs:	State Funds	Federal Funds	Total
Personnel Salaries (51)			
Project Coordinator (Lindsay)-half-time		$ 9,866.00	$ 9,866.00
Project Manager-Wallentine		$ 11,621.00	$ 11,621.00
Retrieval Specialist	$ 9,000.00		$ 9,000.00
Field Agents -			
Hawley - Half-time		$ 7,600.00	$ 7,600.00
Church - " "		$ 6,250.00	$ 6,250.00
Kohler		$ 12,350.00	$ 12,350.00
Nielson		$ 12,320.00	$ 12,320.00
Hanson - Half-time	$ 6,750.00		$ 6,750.00
Local Field Agents - 26 agents, 1/3 time, approx. $9,000 average salary	$ 78,000.00		$ 78,000.00
Secretaries -			
State Office (Haslam)		$ 6,660.00	$ 6,660.00
Richfield Center - Half-time		$ 1,836.00	$ 1,836.00
Heber City Center- " "		$ 1,752.00	$ 1,752.00
Cedar City Center - " "		$ 1,920.00	$ 1,920.00
Price Center " "	$ 2,300.00		$ 2,300.00
Technical Assistance Teams, S.E.A. Professional Staff, 600 man days X $50/day	$ 30,000.00		$ 30,000.00
Consultant Services - University Personnel, Private Consulting Agencies, 10 man days X $100/day		$ 1,000.00	$ 1,000.00
TOTAL	$126,050.00	$ 72,175.00	$198,225.00
Employee Benefits (52) (charged as direct)			
Social Security	$ 4,375.00	$ 2,500.00	$ 6,875.00
Retirement	$ 6,125.00	$ 3,200.00	$ 9,325.00
Insurance	$ 675.00	$ 200.00	$ 875.00
Hospitalization	$ 2,700.00	$ 1,200.00	$ 3,900.00
Merit Pay	$ 380.00	$ 175.00	$ 555.00
Industrial Insurance	$ 1,150.00	$ 325.00	$ 1,475.00
TOTAL	$ 15,405.00	$ 7,600.00	$ 23,005.00
Travel			
Director, Manager, and Retrieval Specialist RISE Conference		$ 250.00	$ 250.00
Central Staff 5 trips each to each Service Center 900 mi. x .10¢ mi. x 15 trips		$ 1,350.00	$ 1,350.00

		State Funds	Federal Funds	Total
Travel - Continued				
Master Field Agent travel 18 trips to each district 26 districts x 9 trips x average of 50 mi. x .10¢ per mile = ($2,340)			$ 2,340.00	$ 2,340.00
Out of State travel for project staff = ($1,000)			$ 1,000.00	$ 1,000.00
Miscellaneous travel			$ 260.00	$ 260.00
State Specialists traveling on Technical Assistance assignments, 600 man days x average 50 mi. x .10¢ mi.		$ 3,000.00		$ 3,000.00
TOTAL		$ 3,000.00	$ 5,200.00	$ 8,200.00
Supplies & Material (54)			$ 1,025.00	$ 1,025.00
Communications				
Telephone	$1,600.00			
Correspond.	700.00			
Other	200.00	$ 2,500.00	$ 2,000.00	$ 4,500.00
Computer Processing				
The Boulder Retrieval Center will charge us $1,000/month until we develop our own retrieval capability. Start up costs would run from $600 (Altus) to $1,900 (CCM). It is anticipated that operating costs for our own system would be approximately $800/month.			$ 12,000.00	$ 12,000.00
TOTAL		$ 2,500.00	$ 15,025.00	$ 17,525.00
TOTAL COSTS		$146,955.00	$100,000.00	$246,955.00

ADDENDUM APPENDIX A

The Role of the SEA Professional Staff in Technical Assistance

The professional staff of the Utah State Board of Education, about one hundred in number, are dedicated to the goal of improving education in the State of Utah. The accomplishment of this goal is enhanced as procedures are developed which open lines of communication between personnel of the State Education Agency and the fourty Local Education Agencies of the State.

A significant step has been taken to facilitate open communication with the implementation of the "Technical Assistance" program. This program involves twenty-five rural school districts of the State. It provides rural school districts with a field agent who acts as a process helper to the educators of the districts. His job is to help educators in the twenty-five districts to identify educational problems or needs and then to provide various resources which will aid in the solution of those problems or needs.

Major resources of the State Education Agency available to the field agents are information and human resources.

State Agency professional staff help to make up each of these major resources.

When a request for information is received a staff member serves many functions, such as:

(1) Helping the reference center manager determine the exact type of information desired.
(2) Providing information from his own files.
(3) Analyzing information obtained from ERIC files and other sources for relevancy and appropriateness.
(4) Taking the material to the client to help him interpret it.
(5) Responding to calls for interpretation and clarification after the client has received the information.

If the client requests human help each professional staff member responds individually or as a member of a team depending upon the nature of the request and the desires of the Agency Administration.

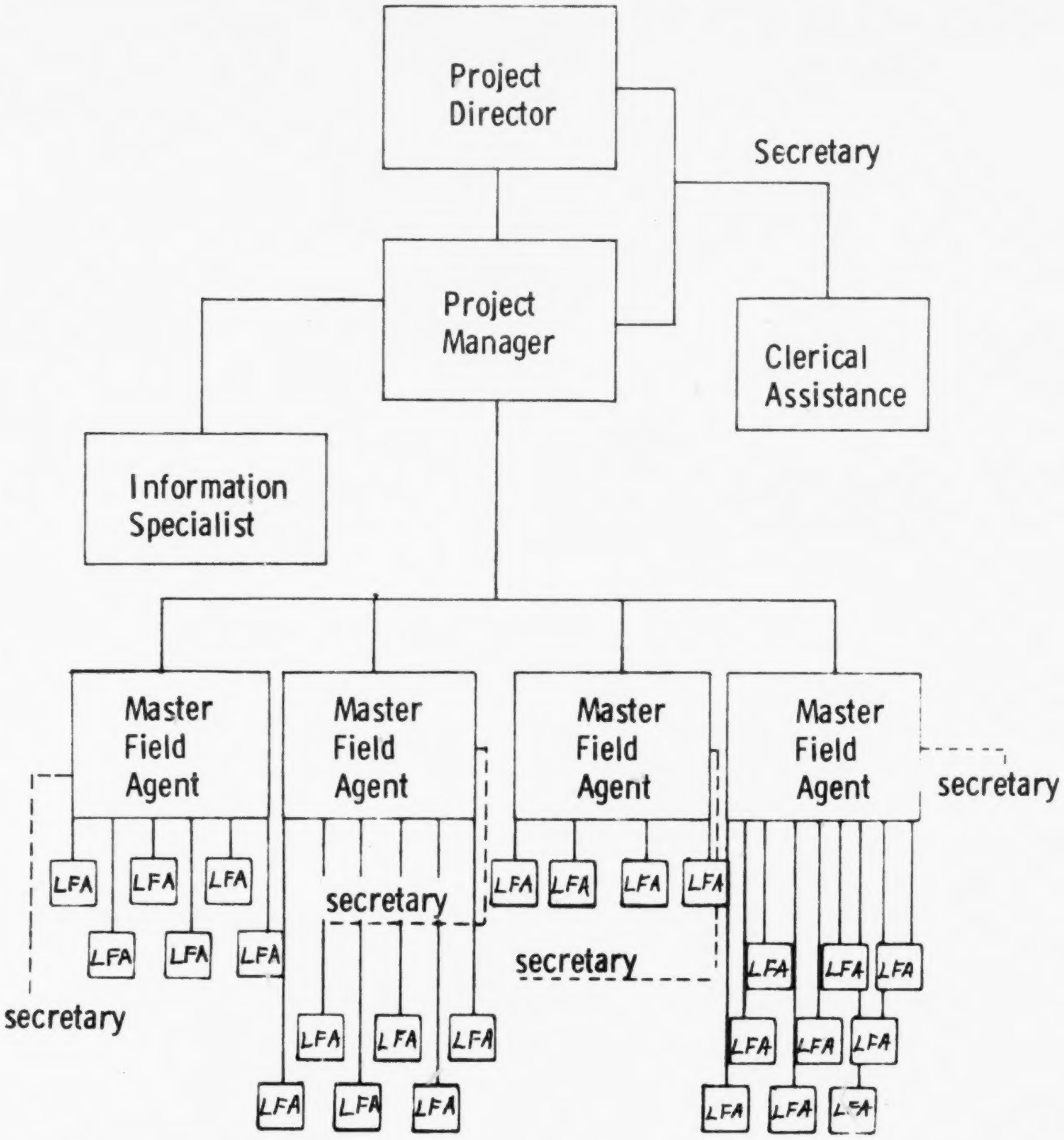
Technical Assistance, an integral State Agency function, provides educators in sparsley settled rural areas the complete services of the State Education Agency staff in an efficient, non-threatening manner.

ADDENDUM APPENDIX B

The Role of the Local School District Professional Staff in Technical Assistance

In each of the rural districts during FY 73 one member of each district staff will be named the field agent and will receive training to help him fill the role adequately. Dr. Ronald G. Havelock states that a field agent needs to believe that educational improvements can be made by a more effective utilization of resources and democratic problem solving procedures. This democratic problem solving process will be passed on to other district staff and training will be provided to help them gain the skills, attitudes and knowledge necessary to function effectively in bringing about educational improvements. Knowledge about effective utilization of knowledge and other resources, and skill in using democratic problem solving techniques will help all district personnel to function effectively. Each would then be a process helper who would use the services of the designated field agent in securing knowledge and other resources which would be utilized in school improvement activities.

Technical Assistance Project Organizational Chart


Project Director
Secretary
Project Manager
Clerical Assistance
Information Specialist
Master Field Agent
LFA
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secretary
Master Field Agent
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LFA= Local Field Agent

TECHNICAL ASSISTANCE PROJECT CHECK LIST

The TAP secretaries are responsible to the Resource Agent, work part time for the Technical Assistance Project, and are extremely important to the success of the project.

The secretary coordinates with the Regional Center specialists and staff, the TAP Reference Center staff, and the requesters in the area.

The basic function of the secretary is to assist the Resource Agent in his attempts to close the gap between research and practice in education.

SPECIFIC RESPONSIBILITIES:

TAP USER REQUEST FORM

Take the request from the agent and type.
If a SID, the descriptors will be indicated by the agent.
Fill out the TAP user request form in quadruplicate. Number and fill in any work done at the center on the request, such as PREP, or an abstract given.
Do a preliminary search of RIE, CIJE, or other ERIC materials. (Use Search Sheet for instructions on how to do this.) Send Search Sheet to RC when further searching by the Center is desired.
Send copies of the TAP user request form to the appropriate source. Three copies go to the Reference Center for further disposition. Please keep one copy of all request forms for the agent's files. The RC will number the requests.
Make out a TAP request form for "local" requests, hold in the Center till month's end. Send "local" request forms and the log sheets to the RC on the last day of the month. These will be recorded and counted in the Project request totals.

LOG	Record the Boulder and "local" requests on the log sheets. Record dates. Record returned "fugitive" information from RC and the dates. Record the sets of "fiche" on the log sheets.
PREP	Keep an up-to-date listing of the Kits and the Briefs as they arrive, also the circulation of these. Handle the ordering operations according to the new PREP policy.
NCEC	Keep an up-to-date listing of the NCEC materials as they arrive and the circulation of these. List the Title III materials as they arrive and the distribution of these.
RIE & CIJE	Keep an accurate record of the arrival of the monthly editions of these journals. Notify Mary Ruth if any volumes do not arrive. Use them in searching.
MICRO-FICHE	Keep a separate microfiche record that indicates the ED number, the number of fiche per document, the arrival date, circulation and return date to the RC. Only the Regional Center will have the record of where the "fiche" is. It is the agent's decision if he wants the subject and title of the "fiche" recorded. Insert "fiche" evaluation form when sending out "fiche" and return these to the Reference Center with the monthly materials. Assist the agent in the "Not Available" document retrieval.
MISC.	Gather and package materials as needed by the agent for his clients, and record the circulation of these. Remain flexible so that whatever the agent must do in the future that is new or different can be handled efficiently.

USER'S GUIDE

The enclosed materials are computer print outs of selected abstracts of ERIC documents pertaining to your request. ERIC is a national information service established to make the results of new educational research available to all educators. Access to ERIC is provided through the Technical Assistance Project sponsored by the Utah State Board of Education.

The research information being provided is intended to offer a display of alternatives and suggestions to stimulate thinking rather than to promote any already accepted educational practices.

1. Please read the enclosed research reports, keeping the Document Request Form handy.
2. As you read the abstracts check the number by which you order the ERIC document that you would like to read in full. The purpose of the abstracting service is to provide a rapid survey of research as an aid to "in depth" document selection.
3. Please ask your agent concerning documents you may want that are listed "Not Available".
4. Give the Document Request Form to your Resource Agent or send to the TAP Reference Center.

Most ERIC documents are available in microfiche form and may be obtained "on loan" from the TAP Center. The 1968-69-70 & 71 microfiche collection is available. MICROFICHE is a reduction of an entire document to a 4x6 inch sheet of film. A microfiche reader enlarges the text.

5. The microfiche documents you order will be sent to the Resource Agent who will deliver the "fiche" and the microfiche reader to you. The reader will be demonstrated.
6. Read and study the "fiche" as you would a book. As you read, other avenues, ideas or search questions may occur to you. Please feel free to discuss these with your agent and ask for further searches. A wide information bank may be tapped to supply your information needs.

HOW TO USE AN ABSTRACT

Please read the definitions below and examine the format of the abstract before beginning work on your packet.

EDO44175 This is the number assigned to each ERIC document abstracted and is used for identification and ordering documents. It is referred to as the ED number.

ABSTRACT: An abstract is a factual, objective, abbreviated version of a complete document. The term document is used to describe any published materials such as research reports, dissertations, bibliographies or monographs. Most ERIC abstracts not only highlight the contents of a document, but also provide a succinct summary of the purposes, procedures and findings of the original document.

PUBLISHER: An alternative source to obtain the document if not available from EDRS - Eric Document Reproduction Service.

DESCRIPTORS: These are educational keywords assigned from the ERIC Thesaurus and are used as a basis for the computer logic which retrieves research information. Scanning these will offer synonyms for your future searching.

HINTS FOR RESEARCH READING

Ask yourself these questions......
What is the document about in general and what is its purpose?
What was proposed?
What was done, and what was the population served?
In what ways might this be of interest to me?

Please fill out the evaluation form and return it in the enclosed pre-addressed and stamped envelope so that we may continually upgrade our service. Thank you.

UTAH STATE BOARD OF EDUCATION
1400 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE STREET
SALT LAKE CITY, UTAH 84111
WALTER D. TALBOT, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

September 13, 1972

M E M O R A N D U M

TO:
FROM: UTAH Technical Assistance Project
RE: Systems survey of ERIC Computerized Search Programs

Please indicate the provisions of your system with regard to the following elements:

A. SEARCH REQUIREMENTS

1. DESCRIPTOR CONSTRAINTS (Fill in)

a. Number of descriptors per search: ______

b. Logical operators (and, or, not): ______

c. Relational operators (Equal, Greater, Less Than): ______

d. Contextual Operators: ______
Text word prefix
Suffix stem
Others: ______

e. Major Descriptors: ______

Minor Descriptors: ______

2. SEARCH CONSTRAINTS (Fill in)

a. Number of searches per run: ______

b. Number of hits per search: ______

c. Can number of hits be limited? ______

d. Describe any limitations on the number of searches per batch. ______
______
______

LERUE WINGET, Deputy Superintendent
Office of Instruction Services

KENNETH P. LINDSAY, Coordinator
Technical Assistance
Telephone (801) 328-5431

3. SEARCH FIELDS (Check)

a. Accession Number ____________
b. Publication Date ____________
c. Title ____________
d. Personal Author ____________
e. Descriptors ____________
f. Identifiers ____________
g. EDRS Price ____________
h. Descriptive Note ____________
i. Abstract ____________
j. Availability ____________
k. Journal Citation ____________
l. Other ____________
m. Can you use more than one field per search? ____________

4. SOURCE FILES (Check)

a. RIE ____________
b. CIJE ____________
c. LEASCO ____________
d. AIM ____________
e. ARM ____________
f. Other (Fill in) ____________

5. RESUME CONSTRAINTS (Fill in)

a. Number of resumes per search ____________

b. Limited to ED numbers? ____________

c. Limited to other? ____________

d. Is a resume report provided? ____________

e. Is a list of ED numbers included for each search? ____________

6. OUTPUT CONSTRAINTS (Provide copy)

a. Fixed output by field ____________

b. Variable output by field ____________

7. INPUT FORMS (Provide copy)

a. Client request form ____________

b. Logic/coding form ____________

8. CODING TRAINING HELPS

   a. Coding instruction manual ______

   b. Does manual contain clear examples of logic variations? ______

   c. Has training program been devised? ______

      1. Number of sessions ______
      2. Length of session ______
      3. Instructor qualifications ______
      ______
      ______
      4. Cost of training ______
      5. Trainee qualifications ______
      ______
      ______
      ______
      ______

B. SEARCH SYSTEM REQUIREMENTS

1. FIle Organization (Inverted, Index, Sequential, etc.) ______

   a. Describe provision for updating, ordering, and deleting. ______

2. Logic Operators (OR, AND, NOT, NAND, etc.) ______

3. Relational Operators (EQUAL, GREATER/LESS THAN, etc.) ______

4. Truncation (Right, Left, etc.) ______

5. Word Length (Fixed Viable) ______

6. Phrase Searches (Yes, No) ______

7. Searchable Data Elements (All, Any, Specific) ______

8. Output Order (Sort) ______

9. Output Format (Fixed/Variable) ______

10. Limit on Number of Hits (Yes, No) ______

11. Number of Programs ______

12. Program Languages ______

13. Required Utilities ______

14. Operation Mode (Batch, On-Line) ______

B. SEARCH SYSTEM REQUIREMENTS - Continued

15. File Format (PX, RIE) ____________

16. Provision for tape updates (Yes, No) ____________

    a. Description of update procedure ____________

    ____

    ____

    ____

17. Program Acquisition Cost

    a. Installation ____________

    b. Maintenance ____________

    c. Updates
        1. Quarterly ____________
        2. Monthly ____________

    d. Initial File Preparation ____________

    e. Back Files ____________

    f. File Inversion ____________

18. Program Status

    a. Source Decks ____________

    b. Tape ____________

    c. Cost ____________

19. Program Operation

    a. Average run-time per search ____________

    b. Average cost per search ____________

20. System Documentation

    a. Data preparation/formats ____________

    b. System Documentation ____________

    c. Program Documentation ____________

C. COMPUTING SYSTEM REQUIREMENTS

1. Computer Brand ____________
   a. Model number ____________
2. Operating System ____________
3. Compilers Required ____________
4. Utilities Required ____________
5. Core Storage ____________
6. Peripherals (Check)
   a. Reader ____________
   b. Printer ____________
   c. Number Tape Drives ____________
      1. BPI ____________
   d. Number of Disc Drives ____________
      1. Model ____________
   e. Other ____________

UTAH STATE BOARD OF EDUCATION
1400 UNIVERSITY CLUB BUILDING, 136 EAST SOUTH TEMPLE STREET
SALT LAKE CITY, UTAH 84111
WALTER D. TALBOT, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

November 2, 1972

M E M O R A N D U M

TO: The Reader
FROM: Technical Assistance Project
RE: Quarterly Report - August - October, 1972

Due to the lateness of the last Quarterly Report, May 1 - July 31, 1972, this report will cover only August 28 - October 31, 1972.

This report is for the most part attuned to the objectives and tasks of the third year proposal.

Brief segments have been taken from the proposal and inserted in the report for clarification and the Technical Assistance Project Activities relating to these follow, hopefully, in chronological order.

1. Major Activities.
   Institutionalizing the Field Agent Program.
   Status of Institutionalizing the Field Agents in the Local Districts.
   Effects Over Time of Institutionalized Field Agent Program.
   The Piloting of the Project in An Urban District.
   Day to Day Operation of the Program.
   Oversee Acquisitions and Resources.
   Agent Activities.
   Dissemination Activities.
   Activities of Project Director

2. Major New Departures.
   Computerization.

3. Future Activities.

4. Problems or Challenges.

To maintain the continuity of the report most of September's monthly report is enclosed with October's dates following sequentially.

An appendix is included for those who are interested in seeing the actual documents produced.

KW/mrh
Encl.

LERUE WINGET, Deputy Superintendent
Office of Instruction Services

KENNETH P. LINDSAY, Coordinator
Technical Assistance
Telephone (801) 328-5431

APPENDIX

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QUARTERLY PROGRESS REPORT

Contract No.: OEC-0-70-4741

Period: August 28, 1972 - October 31, 1972

Date of Submission: November 1, 1972

Name of Agency: Utah State Board of Education

Title of Project: Technical Assistance to Rural Schools in Knowledge Utilization

Name of Project Director: Kenneth P. Lindsay

Office of Education Division: National Center of Education Communication

1. Major Activities during this Period (in light of objectives and work plan):

Institutionalizing the Field Agent Program

September

Dr. Lindsay presented the third year proposal to the Superintendents in Norm Kohler and Ruth Nielsen's areas respectively The identification and criteria for the selection of the additional EEA's to be appointed from district staffs were discussed. It was found that some Superintendents would like to have their principals become agents. These people will be trained in the Far West's EIC Training. Superintendents from Ruth's area agreed that Ruth should take the EIC training. Agent's EIC training will precede their becoming trainers for the new EEA's.

September 27

Dr. Robert Hanson, working out of the Southeastern Service Center will be working with all principals in Carbon, Emery and Grand Counties and the Central staff of San Juan District. These have been tentatively assigned and an early November meeting is projected.

Jerry Hawley in the Southwest Media Center has assigned nine agents -- seven on the individual building level and two on the district level.

September 27 Meeting

Far West Lab's Educational Information Consultant Program began with the Technical Assistance Staff. The project staff completed the first two sessions defining the information consultant and playing the "T" puzzle game indicating the difficulties of communication.

Other:

Dr. Terrance Hatch from Utah State University attended the meeting to open discussion on obtaining of credit for mini-courses (Far West Lab) and the IDI Institutes.

It was decided to send the monthly report to Superintendents in the target areas.

The new Catalog of CAT search information from Boulder was introduced. The cost of the individual searches was discussed and may put a damper on requests and perhaps inflate use of the packaged materials over the individual searches. Boulder recommends running CAP searches first as these may include older material, but material that has been carefully evaluated. Boulder also recommends use of the CAT information and descriptors to develop a more specific SID.

Far West Lab's Minicourses schedule was discussed and a visual chart will be developed for immediate identification of course and agent.

October 10 — An Educational Information Consultant (E.I.C.) meeting was held in the Salt Palace from 7:00 - 9:00 p.m. Negotiation Module initiated.

October 19 — An E.I.C. meeting was held in Cedar City from 7:00 - 9:00 p.m. Negotiation Module was completed. Several agents were in Cedar City for the Instructional Development Institute held there. Ruth Nielsen and Dr. Lindsay joined them.

Status of Institutionalizing the Field Agent in the Local Districts

N.U. Service Center, Heber City — Mr. Norman Kohler, Agent, will meet with the Superintendent's Advisory Board on November 14, 1972, to discuss the identification of district agents.

C.S.A. Center, Richfield — Mrs. Ruth Nielsen, Agent. The Superintendent will make the decision on district agents after the E.I.C. course is completed by the "master" agent.

Mrs. Nielsen will meet with the Superintendent's Advisory Board on November 1, 1972.

S.E. Service Center, Price — Dr. Robert Hanson, Agent, will meet with his Superintendents on November 28, 1972.

S. W. Media Center, Cedar City — Mr. Jerry Hawley and Mr. Dave Church, Agents. Two representatives from each district have been identified, giving a total of 12 district agents.

October 20 — To gather data needed to substantiate the:

Effects Over Time of Institutionalized Field Agent Program

Technical assistance and the use of the knowledge base will become an integral part of the day to day operation of the twenty-five districts served by the project. Skilled agents in each district will make knowledge utilization a regular and systematic function of the school personnel within the district. Success will be determined by:

(1) An increasing number of information requests of at least 10% per year for the next three years by the schools of each district.

(2) The identification of and long range planning to correct educational problems of greater scope and magnitude than those problems identified during the first two years of the project.

(3) An increasing number of information requests of at least 15% per year for the next three years by the district staffs of each of the districts.

October 20 — Materials were prepared listing schools by Agents' districts to collect number of requests over the past two years. Careful itemization will build on these during the third year of the project for evaluation purposes.

THE PILOTING OF THE PROJECT IN AN URBAN DISTRICT

September 30 — Dr. Lindsay sent a letter to Urban superintendents explaining the Technical Assistance Project and asking that after reading the enclosed explanatory material that any superintendent interested indicate his desire to participate by October 15. (See Appendices Item No. 1)

Regional Resource Centers — Task: To assist in the developing of Utah's Regional Centers into Resource Centers as back up for present agents' dissemination capabilities.

September 27-28 — Educational Products Display was held in the Salt Palace during the annual Utah Education Association conference that draws teachers and administrators together. Publicizing of the Educational Products Display was done prior to the display by the agents in their target area, through brochures, newsletters and personal contact. The following consultants were available: Miss Nancy Evers, Wisconsin R & D Lab, Mr. Jerry Exum, CEMREL, Mr. R. Gordon Hughan, National Instructional Television, Mrs. Judy Anderson, Southwestern Cooperative Educational Lab and Mr. Fred Harvey, Far West Lab.

An excellent meeting was held Friday September 28 for project personnel and the consultants from the Labs. Informal discussions helped the agents get a real feel for the Lab programs as they visited each presentation after the meeting for further details.

Two of the Educational Products Minikits have been received in Utah and are being circulated by the agents in two target areas. This will give additional follow-up to the Educational Products Display on a more personal basis.

Test Collection Bulletin and A Consumer's Guide to Educational Innovations were ordered for the agents to assist them to keep up with innovations.

October 12

Kathy Wallentine gave a Technical Assistance Project presentation to Ogden District staff. Ogden is considering entering the Technical Assistance Project, as well as Granite, Tooele, Box Elder, and Nebo Districts.

October 18

Dr. Lindsay sent a letter to the five districts applying, asking for a brief description of their proposed commitment to the Project. The Superintendents were to respond by October 31. (See Appendices Item No. 2)

October 20

Tooele District's Curriculum Director called for more specific details.

Day to Day Operation of the Program

Evaluation:
Task:

To develop an adequate evaluation device that will cover both information retrieval processes and the implementation work of the field agents.

Activities:

January 1973	1. Use the services of the Utah State Board of Education Planning Unit to assist with this instrument.
October 1972	2. Develop an adequate reporting system within the project to develop and give current studies on at least two case studies per agent per month.
FY 1973	3. Cooperate with the new NCEC project to study the collection of data needed for projects of this type.
	4. Analysis of record keeping as a possible answer to the agent overload problem.
	5. Although new agents will be added to the system and information retrieval will be diffused, even possibly to the individual school level, careful feedback is needed as we proceed. Emphasis should be put on developing a working plan for keeping the interpersonal relationship between agents uppermost. Data may be relayed to Dr. William Paisley as he develops training packages.

October 1972

A new form has been prepared to collect Case Study information from the agents. (See Appendices Item No. 3)

October 1972

A new form for ordering the microfiche documents, stating agent's name and center, also including three evaluation questions, was developed by the Reference Center with help from the SEA Planning Unit personnel. (See Appendices Item No. 4)

Oversee Acquisitions and Resources

Task:
FY 1973

The Project Manager will continue to gather relevant resources, subscribe to current print materials, and build files of national programs.

October 1972

RIE and CIJE Descriptor and Identifier postings purchased from LEASCO. Several new subscriptions added - Education Digest, Saturday Review and Education U.S.A. Also six serrano tapes purchased from UCLA.

October 1972	Coordinated with Career Education Specialist to order ERIC materials and located local Career Education materials to meet needs of individuals submitting Career Education funding proposals to SEA.
October 1972	The Project Manager completed several management tasks related to the Media Division operations and turned them to appropriate personnel for implementation. These include (1) Media Division Cataloging procedures, (2) SEA subscription print out, (3) SEA Agency Publications Policy was formally accepted by Agency October 6 and will take effect December 1 and (4) Revised Agency Publications price list completed.
October 26	Visited with Chairman of the State Board of Education - reviewed project and discussed future directions, as far as State Board presentations.
October 1972	Visited exhibit to see Bell and Howell microfiche reader, lap.

Agent Activities

Mr. Norman Kohler, Agent, N.U. Service Center, Heber City.

October 3, 1972	Meeting with North Rich faculty - Minicourse #9 (Cognitive Questioning) presented. The faculty decided not to proceed with this.
October 5, 1972	Successfully organized and carried out outdoor environmental programs at Wasatch High School, involving 80-90 students.
October 9, 10, 11	I.D.I. Training session at Salt Lake.
October 11, 1972	Norm Kohler received his microfiche reader back from Bell and Howell, hopefully repaired.
October 12, 1972	Took microfiche reader and microfiche on drug abuse materials to Mel Richins, a teacher.
October 17, 1972	Presented I.D.I. information to Superintendent's Advisory Board.
October 19, 1972	Cedar City E.I.C. training.
October 24, 1972	Met with Jay Hainsworth of Adult Education and discussed teaching for Community Education.
October 25, 1972	Presented Minicourse #8 to the North Summit Elementary faculty. Indications are that the faculty will use Minicourse #8 if released time can be obtained.
October 26, 1972	Arranged for Dahl Brown, a teacher at Wasatch Junior High, to visit a class in the Duschene School District. The class subject was Communication, Psychology-Sociology.

October 27, 1972	Met with Bill Dudley, Principal of the Wasatch Junior High, regarding Minicourse #8. Also met with Irene Bardall, Chairman of Grading Report Committee, and provided information on grading and techniques.
October 27, 1972	Met with Terrance Hatch regarding credit on Minicourses.
October 28, 1972	Release time for North Summit project.
October 31, 1972	Visited Estella Richins regarding Science Testing and Jim Hamna regarding Elementary Counseling.

Dr. Robert Hanson, Agent, S.E. Service Center, Price

October 1972

The San Juan District was found newsworthy by Salt Lake City newspaper, The Deseret News, recently. Two interesting changes have occurred in recent years in the area.

1. Indian students, mostly Navajo, but including some "Southern Utes" made up nearly 47% of the district total. Anglos may become the minority this fall.
2. Indians also may gain the majority on the San Juan Board of Education. The board of education which takes office on January 1, 1973 will include at least two, and possibly three, Navajos.

Mrs. Ruth Nielsen, Agent, C.S.A. Service Center, Richfield

October 1972

Ruth has been working with the Social Studies teachers at Manti High School. The State Social Studies Specialist visited the school and was involved in identifying needs. The group is looking at Minicourses to be used in a social studies program. The agent has obtained materials from other schools in this area and the Social Studies Specialist has provided games and other materials.

A request for Industrial Arts innovations from North Sanpete High School resulted in being gathered for the building of an "A" frame house as a project in the classes. Costs and drafting plans, possibly including the help of the Sevier Valley Tech, and possible sale of the "A" frame are some items presented to the client.

A presentation demonstrating the microfiche reader, explaining microfiche and the Technical Assistance Project was given by Ruth at a recent meeting of the district Media Coordinators.

Ruth is also experimenting with various ways of meeting the microfiche reader circulation problem.

Mr. Jerry Hawley and Mr. Dave Church, Agents, S.W. Service Center, Cedar City.

October 1972

Most of the agents' time this past month has been devoted to organizing and putting on the I.D.I. The I.D.I. was very successful and was held October 16-20 at the Southwest Media Center. Approximately 50 people attended, including curriculum directors, administrative assistants, principals, a board member, and classroom teachers. The district would now like to put on their own I.D.I.'s.

Dave Church has been circulating Minicourse #5, Elementary Math, to schools in Enterprise, St. George, Cedar City, and Millard.

Jerry Hawley is making arrangements to field test Minicourse #10, Role Playing for Upper Elementary Grades, for the Far West Lab.

Materials on the affective domain are being provided for a Title III project in Iron County through the Technical Assistance Project agents.

Dissemination Activities

Regional Resource Centers

Task: To assist in the developing of Utah's Regional Centers into Resource Centers as back up for present agents' dissemination capabilities.

September 27-28

Educational Products Display was held in the Salt Palace during the annual Utah Education Association conference that draws teachers and administrators together. Publicizing of the Educational Products Display was done prior to the display by the agents in their target area, through brochures, newsletters and personal contact. The following consultants were available: Miss Nancy Evers, Wisconsin R & D Lab, Mr. Jerry Exum, CEMREL, Mr. R. Gordon Hughan, National Instructional Television, Mrs. Judy Anderson, Southwestern Cooperative Educational Lab, and Mr. Fred Harvey, Far West Lab.

An excellent meeting was held Friday, September 28, for project personnel and the consultants from the Labs. Informal discussions helped the agents get a real feel for the Lab programs as they visited each presentation after the meeting for further details.

Two of the Educational Products Minikits have been received in Utah and are being circulated by the agents in two target areas. This will give additional follow-up to the Educational Products Display on a more personal basis.

Test Collection Bulletin and A Consumer's Guide to Educational Innovations were ordered for the agents to assist them to keep up with innovations. (See Appendices Item No. 5)

September 27-28	Five Minicourses are being circulated among our Technical Assistance Project agents. (See Appendices Item No. 6)
October 19	Far West Lab's Richard Bateman offered to have the Technical Assistance Project field test Minicourse #10, Role Playing for Upper Elementary Grades.

Activities of Project Director

August 16	Met with C.S.A. Board of Superintendents to explain the changes in the Technical Assistance Project for FY 73. These changes include the appointing of local agents for each district, the E.I.C. training package, the development of computer retrieval capability in the state.
August 22	(Same as August 16, except with N. U. Service Center Superintendents.)
August 23 & 24	Regional Validation Conference of Title III Coordinators, State Advisory Council Chairmen and Evaluation Specialists. Those Title III projects which meet the requirements of the validation instrument will be included in the reference center's collection of promising practices.
September 6	Technical Assistance Project staff meeting. (Item No. 7)
September 13 & 14	Two day retreat of the State School Office Council for Administration and Planning. The purpose of the meeting was to coordinate programs throughout the agency. One of the topics raised for discussion was Dissemination.
September 18, 19 and 20	A three day retreat of the Research & Development Division. One of the major issues discussed was the coordination of dissemination activities related to the findings and products of the R & D projects, which are administered by the R & D Division and those of the Technical Assistance Project.
September 27	Technical Assistance Project meeting to begin the Educational Information Consultant training program. (Item No. 8)
October 12 & 13	Attended a meeting of the Advisory Committee of the Stanford Project directed by Dr. William Paisley titled, "Development of Training Resources for Education Extension Services Personnel."
October 6	Reported to the Council for Administration and Planning on dissemination activities within the state.
October 10	Met with Rob Steffensen and Kathy Wallentine to select the software package which seemed best suited to supply our needs.
October 23	Met with a class of doctoral students at Brigham Young University and spoke on the subject, "Futures in Education: the Knowledge Explosion."

2 Major New Departures

COMPUTERIZATION

Work Plan for Selecting and Implementing a Local Computerized Search Strategy for the ERIC System.

Task No. 1	Generate alternative computerized strategy
August 1972	Activity #1 - Appoint a task force consisting of the Technical Assistance Project Director, the Technical Assistance Project Manager, the System Analyst with the Planning Unit, and the Systems Manager of the Division of Data Processing to determine hardware and software requirements to support local search computerization. Accomplished August 1972. Members of this committee are Dr. Kenneth Lindsay, Project Coordinator, Kathy Wallentine, Project Manager, Dr. Robert Steffensen, System Analyst, Utah State Board of Education Planning Unit and George Brown, Data Processing Programmer assigned to the Technical Assistance Project.
September 1972	Activity #2 - The task force determines the hardware and software requirements for the local computerized search strategy.
September 2	Kathy Wallentine discussed with Dr. Steffensen what Reference Center responsibilities are toward providing hardware and software requirements. All programs that have been received by the Reference Center have been sent to Dr. Steffensen. Existing programs were read by Dr. Steffensen and Kathy Wallentine.
September 6	Technical Assistance Project Meeting. The computerization objective was discussed with the agents in order to get their input into what the product they would like to disseminate would consist of. They suggested the need for a product that is readable in a short period of time, and that turn-around time of seven days or less would be satisfactory to their clients. Limiting number of abstracts to around 20 was thought to be very effective and thereby going for a second search when necessary was effective. More work would need to be done on the expectations of the client.
September 12	Dr. Lindsay, Kathy Wallentine, George Brown, and Rob Steffensen met again to outline the tasks and activities of the survey and to come to common terminology.
September 12, 13 and 14	Kathy Wallentine and Rob Steffensen met to devise the survey instrument to do a systems survey of existing ERIC search systems. The terminology from programs was discussed and the relevant items dealing with retrieval and computerization were included in the survey form.
September 18	The survey form was distributed during the RISE Conference to the ERIC program people there by Kathy Wallentine. Extensive discussions were held with program personnel on the capabilities of each system.

September 19	Dr. Steffensen arrived and collected the surveys and questioned each of the developers. Those people contacted during the RISE Conference and the ERIC User's Conference were: Dr. Edward F. Krahmer, North Dakota University, Dr. G. Kowitz, Oklahoma University, Dr. M. Frobish, Bradley University, Mr. B. Funderburk, CCM Corp., Mr. Carroll Hall, ERIC/RC, Mr. Bruce Hemminger, Iowa University, Mr. Ronald R. Tschudi, Indiana University, Mr. Al Link, South Carolina, Mr. William McCleary, BOASI, Mr. Roy Tally, Madison, Wisconsin, and Mr. Ted Brandhorst, Leasco.
September- October 1972	Activity #3 - The task force uses elements from the specifications to survey existing computerized search strategies.
September 26	Discussed with Leasco's Sam Marra the type of information necessary that Leasco might provide in their coming newsletters that would be of assistance to Utah at this point in time.

Beginning of Report No. 25

November 1972	Activity #4 - The task force combines existing computerized search strategies with the requirements for local computerization to determine conformities and discrepancies.
October 10	Dr. Steffensen, Dr. Lindsay and Kathy Wallentine discussed the results of the system's surveys of ERIC Search Systems. A set of criteria was developed and Dr. Steffensen was to prepare the rationale and alternatives for computerization to be presented to the Planning Council.
October 11	Dr. Steffensen and Kathy Wallentine discussed rationale and recommendations. Ed. Krahmer's program report was modified to include the later addition of identifier searching. (See Appendices Item No. 5)
October 13	Rationale and recommendations submitted by Dr. Steffensen.
November 1972	Activity #5 - If an existing search strategy favorably conforms to the local strategy requirements a request for a decision to acquire and implement the existing strategy will be made.
October 18	Dr. Walter D. Talbot, Superintendent of Public Instruction, reviewed the rationale and the computerization strategies with Dr. Lerue Winget, Dr. LeRoy Lindeman, Dr. Steffensen,

and Kathy Wallentine, Project Manager.

Dr. Talbot gave the Technical Assistance Project his approval to computerize. (See Appendices Item No. 6)

Ed. Krahmer's system is the first choice for Utah's computerization of ERIC searching programs.

October 20

Kathy Wallentine called George Brown for state of ERIC tapes. No answer to date.

October 20

Kathy Wallentine talked with Ed. Krahmer on identifiers and found that by buying Leasco's identifier tape Ed's system can search these at the present time. Local modifications made by Dr. Steffensen could be made to search descriptor and identifier tapes concurrently. Other details discussed.

October 20

Kathy Wallentine called Ted Brandhorst, Leasco, who will send the necessary information for subscribing to ERIC tapes. He also stated we would be better off buying the tapes from the beginning rather than attempting to fill in the tapes already purchased. Cost would be about $320.00 for tapes at 1600 BPI which Utah's computer can handle. This will make Utah current with the ERIC tapes. Ted stated Utah could receive these in about 10 days. He will also send a letter stating no other company exists in hopes of getting through Utah's delayed bid rulings. He suggested we use Option 1 and not send our own tapes.

Information not yet received.

October 24

Ed. Krahmer called and talked to Kathy Wallentine and Dr. Steffensen. Many details were discussed on searching, computerizing, tapes, and training. An upsetting item was the proposed cost of $1,300.00 for bringing three people to Utah to do training and installation. The estimate given was $500.00, approximately. The biggest addition in cost was air travel. Estimated cost of tapes and installation of program now near $1,620.00. Tentative date selected is November 17.

Follow up - Dr. Steffensen had talked to George Brown once, but will follow up computer details. The survey sheet was sent to George Brown.

November 1972
Task #1

Activity #6 - If no existing search strategy conforms to the local strategy requirements the task force will determine the ability to develop the search strategy locally.

Activity #6 will not be needed at this time, only to the extent that Dr. Steffensen may adopt the descriptor and identifier searching. For this Ed. Krahmer has given permission.

The program is one that may be adopted to other ERIC based materials such as AIM/ARM and CEC collection at a future time.

The program also may be modified by the Utah Project and will take advantage of any future improvements made by Ed. Krahmer.

Task #1
November 1972

Activity #7 - If no existing search strategy is suitable and the ability to develop the strategy locally is not possible, the task force will recommend continued searches from Boulder, Colorado.

This recommendation was not needed.

This completes the seven activities listed under Task #1 - Work Plan for Selecting and Implementing a Local Computerized Search Strategy for the ERIC System. Completion of this phase - October 30, 1972.

Task #2

Implement the Selected Strategy for Performing ERIC Searches.

August 1972

Activity #1 - Until ERIC searches can be performed locally, Boulder will be contacted to supply them. In the event that a local search strategy cannot be provided searches will be continued at Boulder.

Status:

Continuation proposal still in process. The Boulder contract has not been consumated although discussions have been held with Bill McCleary - October 5, 1972. A contract will be forwarded.

October 9, 1972

A contract with the Boulder Information Retrieval Center was finalized providing the ERIC computerized services to the Technical Assistance Project.

Discussed on previous page.

October 1972

Activity #2 - If an existing search strategy is to be installed the Systems Manager of the Division of Data Processing will make an assessment of the requirements for installing the system and submit them to the above mentioned task force for consideration.

October 1972

Activity #3 - The task force will evaluate the Systems Manager's assignment of the proposed strategy to determine the resource requirements for installation.

October 1972

Activity #4 - The task force will submit the determined resource requirements to the coordinator of the Technical Assistance Project for approval.

November 1972

Activity #5 - The coordinator of the Technical Assistance Project will seek approval for the proposed strategy resource requirements from the Executive Committee.

November 1972

Activity #6 - The Executive Committee will indicate approval of the request to utilize required resources to install the strategy.

November 1972	Activity #7 - If approval is given the Systems Manager will make the arrangements to install the proposed existing strategy together with a timetable of anticipated completion of installation.
	The tentative date of installation is November 17. This includes installation and training of Utah personnel.
October 30, 1972	Dr. Steffensen will draw up a contract document noting system specifications and entitlements.
November 1972	Activity #8 - If approval is not given for installation of the proposed strategy by the Executive Committee, the task force will consider either an alternative existing strategy or recommend continued service at Boulder.
	Approval was given for installation of computerized system.
December 1972	Activity #9 - Upon completion of the installation of the proposed existing strategy the Technical Assistance Project Manager will assume managerial responsibilities for utilizing the strategy in accordance with the operation of the Technical Assistance Project staff.
	Activity #9 calls for the hiring of an Information Specialist to code the requests and review the returned ERIC materials. The job description is attached.
October 15, 1972	Kathy Wallentine discussed this with Dr. LeRoy Lindeman, Instructional Media Division Administrator, and Dr. Steffensen. The person hired should be familiar with education and a precise, careful individual.
October 18, 1972	In the meeting with Dr. Walter Talbot, Dr. Lerue Winget mentioned that the Information Specialist may come from the existing state agency staff. Dr. Talbot's agency-wide recommendations are not to hire new personnel.
October 20, 1972	A memo was submitted to Dr. Lerue Winget, Deputy Superintendent, Office of Instruction Services, describing the individual needed and giving the job description. Action needs to be taken soon administratively on this activity. (See Appendices Item No. 11)

3. Future Activities

1. Computerization strategies to be carried out.
2. Information specialist to be hired.
3. Training of agents and Information Specialist in coding for Ed. Krahmer's system.
4. Begin running and evaluating own searches.
5. Educational Innovations Directory for project use to be completed and distributed.
6. Interim Report completed.
7. Turn attention to day by day refinement of operation of project - searching and retrieval capability.
8. Continue E.I.C. sessions.
9. Continue working on ERIC acquisition program.
10. See and use new microfiche readers that are out now - Bell & Howell and Kodak have new models.

4. Problems or Challenges

Cost of implementation of computer program and purchase of identifier tapes may become a problem after budget review.

Information Specialist's capabilities.

Salesman visitations.

CHAPTER VII

FINDINGS OF THE TECHNICAL ASSISTANCE PROJECT

FINDINGS OF THE TECHNICAL ASSISTANCE PROJECT

These comments are derived from the experience of the past two and one-half years. They are not prioritized.

Unity, responsiveness and cohesiveness of the retrieval unit and the field agents' component is vital.

Individualized searches take time to write, run and evaluate. A system of "in-center" searching was devised due to the lengthy turn around time on "SID" searches from the Boulder Retrieval Center. The client needs some tangible evidence of service and/or faster turn around time.

It was necessary to provide full documentation in some form, microfiche or hard copy, to the client. The project determined to go the microfiche and microfiche reader route.

1. May be less expensive to client but the microfiche collection and cabinets become a large yearly expense.
2. Microfiche readers are expensive, and if the projects are successful, more will be needed for the original target audience as well as new regions being opened up.

The Utah project has not stressed the ability to produce hard copy documents, due to lack of time and staff.

Clients need a great deal of training and familiarization time in the ability to read and understand research documents. Utah clients are not research oriented and most are not to the level of sophistication to read and utilize research findings therefore they remain on the level that expects information products to give "instant answers." Clients implement "by feel" rather than by studying research evidence. This "re-training" is done by the agent and is a gradual process. Results are heartening when they occur.

Expectations of what the system actually will and can provide need to be defined before hand by a project and these expectations conveyed by agent and retrieval staff to the clients. This must be done before use of the service.

A great deal more time needs to be spent in public relations, stressing expectations and advertising long before the project actually goes into operation. A project should not depend on brochures or word of mouth, during early days of service to be enough.

Clients are "solution" oriented and the project found it was not a good idea to attempt diagnosing the individual educator's problem at the beginning of the relationship phase.

The project encountered real difficulties in locating "hard to find" information, as well as "not available" ERIC documents. Time to obtain, cost and staff time were salient features.

The project was urged to computerize when time and energies were completely devoted to building the system. At this time there was no centralized agency to help with gathering evaluative information on ERIC computer search systems, in fact, there were very few options, (Query) being the best known program at the time. The Boulder Retrieval Center at this time filled an important need. Today with a wide variety of systems to choose from, and evaluative information and expertise available from other information centers, new centers, if staffed efficiently, can move directly into their own computerizing.

Start up time of a project of this type should be about six months prior to the time the project is to begin, to allow components to learn to work smoothly together and make decisions on these major topics before hand.

Inability to obtain help in getting needed materials, frustration in not having any personal contact in the companies and in particular the Superintendent of Documents (which is a persistent problem) plagued the project.

Though the project studied other's recommendations and did everything possible to provide adequate microfiche readers, our experience with the Bell & Howell Mascot has caused grief to the present. There have been constant difficulties with the focusing of some of the readers. Three of the readers were replaced by the company. Today there are several brands of small portable readers available to select from and much more information on microfiche (materials that may be obtained on microfiche, as well as guidelines for utilization and selection.) Many new materials that schools can use are being put in microfiche form, giving added reasons for the purchase of microfiche readers by schools.

Most important is the need to provide the capability of providing all types of information, local and national. Eventually due to time commitments and staffing, the random requests of users for "fugitive" information must be put further down the priority list and procedures developed to handle these. The TAP program has a pre-typed form on which the name of program, book or material is typed in and mailed off. Sometimes an answer is received and sometimes not.

Training Needs of Project Staff -- summarized
    Human relations training
    Computer Understanding

Bureaucracy Training
    Understanding ordering procedures
    Contracts, fiscal and financing procedures

State Agency introduction on a more concentrated formalized basis, introducing the agents to specialists and vice versa.

Specific training courses in information retrieval process from negotiation and request seeking to transformation including how to interpret information, translate into action alternatives, selecting appropriate solutions, motivating to new practices, and assisting with implementation (a la Havelock).

Training in evaluation procedures, documents, pert or PPBS materials applied to project personnel, including secretaries. One problem the project has had is not getting the full half time of agent's secretaries.

Training for the retrieval staff in resources:

Names, contacts and phone numbers in all companies to be dealt with directly for materials should be supplied prior to initiation of project.

Demonstrations and workshops for these contacts who meet and demonstrate materials, and discuss ordering procedures.

Validated, accurate lists of clearinghouses - personnel, labs and centers, other information centers provided to staff and kept current.

Lists of "good" newsletters.

Initial copies (free) of materials from clearinghouses, labs, etc. for advertising, as well as further pruchase.

Core list of journals and reference books that a center should have access to.

Project should be made aware of the costliness of this venture before entering - microfiche, xeroxing, phone calls, indexes, mailing, to say nothing of computerized searching.

Introductory course in research for project personnel.

Simplified recording and filing techniques, job descriptions and specific duties need to be solidified before hand. The turn over in secretaries has been a problem with the project and caused delay and stress to agents. Luckily the agents have remained constant with the early exception of Ruth Nielsen replacing Voyle Munson.

Need for an adequate turn around time capability whether utilized or not.

Noted lack of need for consultants in very early stages of project. Procedures can be determined during this time.

Necessity of Project to have an accurate information needs assessment of clients.

Ability to adapt and absorb new materials as they become available and to set up circulating policies and advertising procedures that will cover these.

Necessary to foresee to some degree the various components of the system as a whole: field agent, retrieval staff, SEA facilities - media, printing and specialists, national scene, rural scene, dissemination, ERIC use, ERIC acquisitions, local programs, communications, regional centers -- all need a niche in the organizational planning.

Overall need to follow the needs and requests of the educator client.

Generally speaking the pre-packaged materials from Boulder operation have been useful adjuncts to the project capability. The project has kept adminitions of evaluators in mind.

Retrieval staffs should have enough people to perform the many facets of the operation, from keeping the "fugitive file" current to writing papers and preparing media presentations.

Keeping retrieval staffs current on innovations in microfiche, computer technology, programs is essential. This role has been filled well by the NIE task force on Dissemination. However, copies of communications such as the ERIC user notes might be sent both to the project directors and the retrieval staffs.

It has been a viable concept to have the field agent act as an overall specialist and resource in his own right, and to develop reciprocally the capabilities of the regional center personnel.

It is another viable concept that the agent be responsible to the local level rather than the SEA.

Agents do, after a time, become involved in various forms of the "change" process - IDI's, Lab products, Educational Products Display, etc.

The Utah project has used SEA specialists in various roles extensively. The agents have found that they, themselves, are extremely valuable in:

> Arranging for meetings - time and places.
> Defining specific agendas for meetings.
> But especially in the follow up, after the specialist has returned to the agency.
> The agent may get additional materials, redefine guidelines, field additional questions, and give personal encouragement that aids the teacher or administrator in carrying out whatever may have been concluded. The agent is close by and is in an excellent position to do this.

Other follow-up activities that the project has found to be very worthwhile are the sponsoring of visits between teachers and administrators to other schools. The agents go on these as well as making arrangements for these.

Agents and retrieval staff need guidance and affective support to play so new a role and one with so few guidelines.

The agent's satisfactions will ultimately be personal ones derived from serving the client well, and in which cases the client usually takes the "credit" for the action.

Agent's role as a linker is a difficult one as he is not the specialist or expert but a generalist linking client to specialist and yet he needs to have a wide familiarity with all educational areas which is difficult to accomplish when spending working hours with clients.

Need for network systems to identify training and utilize more extension agents that are closer to the school situation, i.e., District agents, Utilization of SEA, Media division networks, others yet to be uncovered.

Need to have more accurate evaluative instruments that get to the "student" level. The Planning Unit of the SEA will assist with this during 1972-73.

Utah has been cited as having a more decentralized system in retrieval in that the agent has more decisional input in how the request should be fielded, etc. Even with larger staffs and local searching, it is still the feeling of this project that the agent should be allowed this freedom.

Several quotations from a speech by Bill Gephart* conclude this list of findings. Mr. Gephart succinctly outlined the curcial guidelines for a successful information retrieval service with which the Technical Assistance Project wholeheartedly concurs.

He stresses the importance of real communication, not "just presenting words to other people."

> "To improve or assure communication we must have the addition of feedback and confirmation. Feedback lets the presenter know what was received and confirmation assures the receiver that his part in the communication process was played right. Both of these must be built into the verbal interactions between information services and clients if satisfactory service is to be rendered."

> "In conclusion, I believe that the provision of information to clients is determined by the quality of the interface** roles in information services. To the degree that communication takes place that (1) specifies the information needs and (2) reports in acceptable and understandable form, the

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*Presentation at the U. S. Office of Education Meeting of Directors of Education Improvement Centers, Silver Springs, Maryland. September 13-14, 1971.

** Interface is Gephart's term for the intersection of the information service and the client.

service will be of value. Central in that communication is the acceptance of the client's problem, which calls for subjugation of self and exploration of the client. Further, it calls for a delineation of the problem in terms of the nature of the client's intention and the barriers to his accomplishment. Careful explication of these points sets sould parameters for the search and syntheses effort, the technical role of the information specialist.*

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*The Technical Assistance Project applies this to the agents as well.

GLOSSARY OF TERMS

Computer Center	Utah--Data Processing Division, located in the Granite District Offices building about thirty blocks from the SEA.
Dissemination	"Communication about the operation and outcome of an educational activity in order to create awareness and understanding of its value, leading to possible adaption or adoption."
Educational Resources Information Center (ERIC)	A nationwide system for collecting, abstracting, indexing, storing and disseminating papers, reports, etc., in the field of education.
ERIC Terms:	
Abstract	The substantial summary citing each document in RIE, and appearing on the first page of each document.
CIJE	Current Index to Journals in Education. A new monthly publication with indexes and citations to articles appearing in 500+ education or education-related journals.
Clearinghouse	Any of nineteen offices handling research information pertaining to a given facet of education.
Hardcopy	Documents printed by a contracted firm on paper large enough for easy reading, collated with a cover, 70% type size.
Microfiche	Microfilm cards measuring 4" X 6", containing up to sixty pages of information per microfiche', available from ERIC Document Reproduction Service; LEASCO Information Products; 4827 Rugby Avenue; Bethesda, Maryland 20014.
Microfiche -Duplicator	Reproduces microfiche (fiche' to fiche')
Microfiche Reader	A machine for reading each page of a microfiche
Microfiche Reader-Printer	A reader that also can print a photocopy of each page of the document. (Fiche' to hardcopy).

Requestor	An educator who requests information about an educational topic or idea from the Information Retrieval Center. Requestors may range from classroom teachers or paraprofessionals to administrators, higher education professors or graduate students.
RIE	Research in Education, an abstracting journal of ERIC documents, issued monthly.
Field Agent Resource Agent Educational Extension Agent	These are various terms relating to the field agent who contacts the client in the Utah Project.
Information Retrieval Agent	The individual doing the coding of the searches for the computer.
NIE	National Institute of Education. NIE is the major Federal agency for educational research and development. NIE and the Office of Education comprise the Division of Education in the Department of Health, Education and Welfare.
PREP	Putting Research into Educational Practice. A series of monthly reports which focus on current educational problems.
Project Director	The Project Director is a member of the State Education Agency staff. His role has been to organize the project, coordinate the work of the Reference Center with Technical Assistance teams and district requests, plan with and support the efforts of the project field agents, and monitor and provide for management of the project.
Reference Center	The information retrieval center located in the State Agency offices.
Reference Center Manager Project Manager	A new role combining managerial responsibilities of running the day to day operation of the program and incorporating the duties of the Reference Center Manager.
Retrieval	Process of extracting educational knowledge from the Resource System.
SEA	Utah State Board of Education, referring to the Agency as a whole, not the governing Board of Education.

ERIC DOCUMENTS UTILIZED BY TAP PROJECT

ED 065 739 ED 065 740	Reports of the Evaluation Component By Sam Sieber, et. al.
ED 064 527	Evaluation Study of NCEC Information Analysis Products: Final Report, Volume I, Description of Study, Mehtodology and Findings.
ED 064 528	Evaluation Study of NCEC Information Analysis Products: Final Report, Volume II, Individual Document Evaluation Profiles, by Judith Wanger.
ED 064 529	Pilot Training Project for Personnel Participating in Pilot State Dissemination Program's Final Report, By Charles Koelling, et. al.
ED 056 254	Field Agent's Role in Education.
ED 056 245	Problems in Information Retrieval.
ED 063 519	An Alternative to Query: Batch Searching of the ERIC Information Collections. By Edward Krahmer and Kent Horne
ED 045 589	Query System
ED 060 922	Evaluation Study of ERIC Products and Services, Summary, Volume I, Final Report, by Bernard Fry.
ED 060 923	Evaluation Study of ERIC Products and Services, Volume I of IV, Final Report.
ED 060 924	Evaluation Study of ERIC Products and Services, Volume II of IV, Final Report.
ED 060 925	Evaluation Study of ERIC Products and Services, Volume III of IV, Final Report.
ED 060 926	Evaluation Study of ERIC Products and Services, Volume IV of IV, Final Report.